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PHYSIOLOGIC THERAPEUTICS IN GYNECOLOGY.*

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There is certainly no branch of medicine in which non-medicinal or natural curative agents, which are included in what is known as physiologic therapeutics, render more important service than in the treatment of the diseases peculiar to women. Of these non-medicinal agents a few have long been known to the profession, and are in daily use by medical practitioners everywhere. I need only mention as examples the various forms of pessaries, abdominal supporters, and vaginal irrigation, in addition to surgical procedures of all sorts. But there are many highly valuable physiologic agents and methods which are not so commonly employed, and which are capable of rendering the greatest service, both in private and in hospital practice. It is the purpose of this paper to point out a few of these.

As entitled to first place among these practical measures, I mention hydriatic procedures. Aside from rest, in acute

inflammations, and curettage in chronic endometritis, there are no means by which acute and chronic pelvic inflammations may be so effectively combated as by the simple measures with which rational hydrotherapy acquaints us.

In a paper read before this section at the annual meeting of the State Medical Society held May 16, 1901, I described a considerable number of hydriatic procedures which are especially valuable in gynecology, and pointed out their indications. I will not burden this paper with a repetition of what was presented in the paper referred to.

I only desire to call special attention to a few simple methods which I find of great practical value in my daily work. First, a few words in relation to vaginal irrigation, a simple hydriatic measure which is perhaps more generally employed by gynecologists than any other. It is hardly necessary to say anything about the technique of this procedure, as this is well presented in most of our recent textbooks on gynecology; but it is safe to say that the application is quite too frequently

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made in a very indifferent manner, so that the excellent results which might be obtained by this valuable remedy are not secured. It is especially important to pay more attention to the point of temperature.

When the purpose of the application is to relieve pain, the application should be as hot as can be borne. It may begin at 104° or 105° , and should be gradually increased to 115° to 120° . A temperature of 122° will sometimes be tolerated. It should be remembered that the temperature of the water falls a little in passing through the apparatus. An allowance of two or three degrees should be made for this loss. Too much importance and emphasis cannot be laid upon the necessity for giving exact attention to this matter of temperature, for a variation of a very few degrees will often make a radical difference in the result. The duration of the douche should be five to ten, or even fifteen minutes. It may be repeated as often as necessary, two or three times a day, or every hour or two, as the case may require.

The efficiency of this measure in relieving pelvic pain is due to the specific influence of heat. Experimental inquiry has shown that heat inhibits pain. Just how or why cannot always be explained; but the fact is known that through the temperature nerves a reflex influence is exerted which somehow lessens nervous sensibility. This fact explains the wonderful effect of hot applications to the cutaneous surface for the relief of visceral neuralgias. The larger the area to which the application is made, of course, the greater is the effect produced. But in many cases great relief is afforded by a small hot application made over the seat of pain, or to the skin area which is re-

flexly related with the internal part which is the seat of pain. Such a reflex relation exists between the vaginal mucous membrane and the pelvic viscera. A reflex relationship of the same sort exists between the pelvic organs and the skin covering the pelvis, the buttocks, and the thighs, especially the inner surfaces, and the feet; hence the efficiency of hot vaginal irrigation in relieving pelvic pain may be greatly increased by a simultaneous application of heat to any or all the surfaces mentioned.

It is well to precede the hot douche by a very hot sitz bath combined with a foot bath at a still higher temperature. The temperature should be, for the sitz, 106° to 110° ; for the foot bath, 110° to 115° . The duration should be five to fifteen minutes. The head should be protected by a cheese cloth compress wet in water at 60° , or less, and applied to the face and neck. Ladies will not in general permit the application of cold water to the hairy scalp. The vaginal irrigation may with good effect be administered simultaneously with the sitz.

The prolonged very hot vaginal douche is also highly valuable as a means of overcoming vasomotor spasm in certain cases of amenorrhea due to local anemia, resulting from irritation of the vasomotor centers. Krull showed that a temperature much above 104° has the effect to produce a paralysis of the uterine vessels which persists for quite a long time after the application.

I have devised a simple apparatus for administering a graduated hot douche consisting of two reservoirs, one above the other. The lower reservoir is filled with water at any temperature desired for the beginning of the application. The upper reservoir is filled with boiling

water. A stop-cock is placed in the bottom of the upper reservoir by means of which the hotter water of the upper reservoir may be allowed to flow into the lower reservoir at any desired rate, thus regulating to a nicety the rate at which the temperature shall be made to increase.

When it is desired to increase the amount of blood through the pelvic viscera, short applications of lower temperature may be employed, as 80° to 60° , for three to five minutes. Still better effects may be obtained from alternate applications. Employ water at a temperature of 106° to 115° in alternation with water at a temperature of 70° —twenty seconds each.

The most convenient method of applying the alternate douche is to employ two fountains, the tubes leading from which are joined by a Y-connection to a short piece of rubber tubing to which the vaginal tube is attached.

In cases of pelvic congestion of a very pronounced degree, and in which pain is not a prominent symptom, the prolonged cold douche may be employed with very great advantage; temperature, 70° to 60° ; duration, 10 to 20 minutes.

The patient's sensations are a most excellent guide in respect to the temperature which should be employed. If pain, backache, dragging sensations and other discomforts are relieved, the application has done good; if these symptoms are aggravated, the temperature or duration of the application should be modified. Very often the best results may be obtained by a very hot vaginal douche, 110° to 115° for five minutes, followed by a prolonged cold sitz bath at 75° to 65° for eight to twelve minutes, accompanied by constant rubbing. A very hot foot bath should be administered simultaneously with the sitz.

The effect of this application is a transient dilatation of the pelvic vessels followed by vigorous and prolonged contraction. It is very excellent for cases of chronic metritis with erosion, relaxation of the vaginal walls, and cervical and vaginal catarrh.

The prolonged cold sitz bath, 75° to 65° , eight to twelve minutes, either with or without preparatory vaginal irrigation, is a most valuable measure in a great number of so-called chronic pelvic inflammations and congestions. It is contra-indicated, however, in cases in which pain is a marked symptom, in amenorrhea, in amenic conditions due to extensive exudates from perimetritis and parametritis, and in cases in which constipation due to pseudospasm of the colon is present. It is also contra-indicated in cases of inflammation of the bladder. Cold increases vesical tenesmus.

The revulsive sitz is one of the most effective means of relieving backache and other pains and discomforts which are commonly present in chronic pelvic disorders. It consists of a short, very hot sitz, accompanied by a still hotter foot bath, followed by a very short application of cold water to the parts which have been immersed. The temperature for the sitz should be 110° to 115° ; for the foot-bath, 112° to 120° ; duration three to five minutes. At the close of the bath, the patient may stand up while a pailful of water at 70° is dashed over the hips, first one hip, then the other. The water should not fall directly upon the hypogastrium. The patient should remain standing in the foot bath while still colder water is dashed upon the feet. The patient then lies down and receives a cold towel rub or a cold mitten friction to tone the vessels of the general cuta-

neous surface and produce a general tonic effect. All hot baths should be followed by some cold application of this sort, to antagonize the depressing effect of heat upon the nervous system. Even a hot vaginal douche will often produce a very depressing effect which must be removed by some cold, tonic application.

The influence of cold in antagonizing the effects of heat was well shown in some experiments I made some time ago with a very strong young man who was kept in a hot bath until he became so weak that he required an assistant on either side to enable him to stand upright. Just before the hot bath his strength had been tested by the Universal Dynamometer, and found to be considerably above the average. Immediately after the bath the strength was again tested and found to have been reduced more than one-third. A short, cold shower bath and spinal douche were then administered for about three minutes, and the strength tested again. The total lifting power was found to be greater than before the bath. This effect of cold in removing the depressing effects of heat is immediate—practically instantaneous. It is very important to keep this fact constantly in mind when employing hot applications for the relief of local ailments as well as in the application of general hot baths; for a local hot application, as a fomentation over the abdomen, a hot enema, or even a hot foot bath in the case of a very feeble, nervous woman, produces very pronounced depression. If the patient is left in this condition, several hours may elapse before the nervous system will recover its normal tone; but by the application of the cold towel rub or cold mitten friction, employing water at 60° or less, the nerve tone

may be restored at once, so the patient will feel refreshed and strengthened.

I may remark at this point as well as any, perhaps, that in my practice I find general cold applications quite indispensable in the treatment of all sorts of gynecological cases. I usually make these applications twice a day, and sometimes three times a day. At each application the patient receives a little lift, and that the effect is not a mere transient nervous impression is shown by the steady gain from day to day in general strength and tone, the improvement in appetite, the increase in hemoglobin and blood count when these are below normal, and the general feeling of well-being. The patient soon recognizes this and learns to appreciate it, even though the applications may be at first slightly dreaded.

Great care must, of course, be taken in beginning the use of cold water in nervous cases. The temperature should not be too low; the amount of surface treated should be small; the application should be short. In an extremely feeble and nervous case, I have the nurse begin with bathing the hands, face, and arms with cold water applied with the hands dipped every few seconds in a bowl of water at 60° standing conveniently near. At the next application the cold hand rub may be extended to the chest; then the arms, chest, and legs, and the back may be included; so in two or three days the whole surface may be treated. Next, a moist mitt, made of moderately coarse cloth, is employed, and the cold towel rub, consisting of a towel wrung out of cold water and applied to the surface and rubbed. The towel is rubbed rather than the skin, and this is rubbed until warm. Still later, when the patient is able to get about, the rubbing wet sheet is employed, and the

shallow bath is employed, and finally, the general douche. The skill of an experienced nurse, one who is well trained in hydriatic procedures, is required to graduate these applications suitably in a very nervous patient.

When visiting a Southern city some months ago, I was called in consultation to see a patient, to whose bedside, some time previously, one of our most eminent American physicians was called. The patient, a woman nearly seventy years of age, had very serious pelvic troubles, and was extremely neurasthenic. The prescription was a cold wet sheet pack. She described the application. She said, "The nurse was to spread a blanket upon the side of the bed, then a sheet wrung out of very cold water was to be spread upon the blanket, and I was to lie down upon the sheet and to be wrapped up in it. The doctor said, 'she will scream and make a great fuss, but tuck her in tight and she will soon warm up.'" "But," she said, "I did not scream, although I wanted to; but neither did I warm up. I lay shivering in that wet sheet for more than an hour; then the nurse got frightened because I looked so bad, and took me out, and I never have taken another." This patient greatly needed tonic hydriatic applications, but the application should have begun with a wet hand rub and cold mitten friction, and should have been gradually increased in vigor from day to day by the graduated plan which I have elsewhere described.

There is no class of patients in which care in the graduation of hydriatic applications is more important than in weak patients suffering from chronic pelvic disorders, especially those over-coddled, cultivated patients, whose nervous systems are abnormally sensitive, and who usu-

ally have weak hearts, feeble, undeveloped muscles, inactive skins, and are highly sensitive.

Hydrotherapy is the ladder by means of which these feeble patients with low resistance may be enabled to climb up to health; but care must be taken that the rounds of the ladder are near enough together so that the feeble, vital resources of the patient may not be too severely drawn upon in the effort.

Leaving out surgical procedures, I believe the great majority of gynecological cases are suffering from the results of feeble physical development and low vital resistance. Chronic vaginal catarrh can not exist so long as the vaginal mucus retains its germicidal qualities, and the vaginal mucus is likely to be normal so long as the blood is of high quality and sufficient in quantity. The lowering of the quality of the blood as the result of a sedentary life and a vicious dietary, causing an accumulation of tissue wastes, and the consequent lowering of the blood alkalinity, may so diminish the germicidal qualities of the vaginal mucus that the pus-producing germs which are always present upon the skin in great numbers, easily find their way into the vagina, and multiply there, producing a purulent catarrh. No amount of local treatment will permanently cure this condition without an improvement in the quality of the blood. By outdoor exercise, a proper dietary, general tonic baths, and other recuperative measures, a multitude of gynecological disorders disappear of themselves without local treatment of any sort with the improvement of the patient's general health, which, from an outdoor life—swimming, sun-baths and sand baths in an outdoor gymnasium, bicycle riding, horse back riding, mountain climbing, sea bathing

and a natural life; in short, a change from the artificialities of our modern life to natural conditions, is often sufficient to so reinforce the vital activities of the body as to enable them to remove the morbid conditions present without local applications of any sort; although in all cases suitable local measures are always helpful in facilitating the cure. But it must be emphasized that these local measures alone will never effect permanent results in cases in which the local disorders are due to general causes.

My observation has convinced me that this is a matter to which gynecologists as well as other specialists, give too little attention. The physician does not cure. The body heals itself. As Dietl, the pupil of Rokitansky, said more than half a century ago, "nature heals. This is the first law of therapeutics, and one which we must never forget. Nature creates and maintains, therefore she must be able to heal." It is the blood that heals; hence the thing to be aimed at in all cases is the production of better blood, and improvement of the general and local circulation. Exercise strengthens the heart, and by developing the muscles, diverts blood into the muscular system, and thus relieves congestion of the pelvic viscera.

I am persuaded that pelvic disease in women, as well as prostatic disease in men, is largely the result of habitual prolonged sitting. The accumulation of blood in the pelvic viscera is not due to the excessive heat resulting from sitting, but to pressure upon the external vessels. The fleshy parts which are under pressure while a person occupies the sitting position are supplied with large vessels, which are, for the most part, derived from the internal iliac, from which vessel also the pelvic organs derive their blood supply.

When by prolonged pressure the blood circulation in the external branches of the internal iliac is considerably diminished, the result must be collateral hyperemia, which in time becomes passive congestion of the internal parts which derive their blood supply from the same source.

When the blood vessels of the legs are contracted, there is less blood in the feet, and more in the head and other portions of the upper part of the body. The same relations exist between the external structures covering the plevis and the internal parts. Thousands of women are suffering constantly with cold feet and legs, especially during the cold season, from insufficient clothing. Internal congestion is certain to result from contraction of the external branches of the common iliac, forcing a disproportionate amount of blood into the internal parts of the pelvis. All these evils must be corrected. One of the most effective means of relieving this condition is carefully graduated exercise, one of the very best of which is swimming, for this produces tonic effects from the contact of the cold water with the skin, as well as exercising the muscles. Light gymnastics, manual and mechanical Swedish movements, and massage are other measures of the greatest value.

I know of no means of influencing the pelvic circulation more effective than the hot hip and leg pack combined with ice-bags applied to the hypogastrium. The hips and legs are enveloped in a blanket wrung very dry out of water as hot as can be tolerated. Then four small ice-bags, or two large ones, are slipped under the upper edge of the blanket and applied to the hypogastrium on either side, reaching down into the groin. The patient is then completely enveloped in a double woolen blanket. At the end of fifteen or twenty

minutes the application is terminated with a cold towel rub or a cold mitten friction. In cases of acute pelvic inflammation the derivative effect of this application may be continued by the application of heating compresses to the legs in connection with ice-bags to the hypogastrium. Heating compresses are applied as follows: A towel is wrung out of cold water as dry as possible and applied to the leg and covered with mackintosh. The leg is then snugly wrapped with several thicknesses of flannel. The application should extend from the feet to the body, and the effect is increased if the compress also covers the buttocks. If necessary, hot water bottles may be applied about the legs so as to secure immediately warming up of the compress. In cases of chronic pelvic congestion in which patients complain much of pain and heaviness, great relief may be obtained by the use of heating compresses alone, applied at bedtime and worn during the night. On arising in the morning the compresses are removed and the legs well rubbed with towels wrung out of cold water.

Observation of many thousands of cases in which I have carefully noted the conditions present, has fully persuaded me that weakness of the abdominal muscles is responsible for a multitude of morbid conditions in the pelvis in both men and women; but particularly in women, for the reason that weakness of the muscles of the trunk is almost universal, in civilized women, owing to their comparative inactivity. Many men are sedentary, but nearly all women spend their lives indoors and under conditions which do not secure proper development of the muscular system. The abdominal muscles and other muscles of the trunk are still further weakened by improper dress which,

through compression of the waist, and especially by the encasement of the trunk in a rigid form prevents proper activity of the muscles of this part of the body. It is very rare indeed to find a woman who has well-developed abdominal muscles. Only laboring women, and those who have had the advantage of gymnastic training, have these muscles well developed.

Undeveloped abdominal muscles, unless over-excited by some internal irritation, are not only feeble, but lacking in tone. This is especially true in feeble women who have borne children. The over-stretching of these feeble muscles, which results from gestation, generally leaves them in a feeble, relaxed state in which they afford almost no support to the abdominal viscera. The result is enteroptosis and displacement of the uterus and its appendages. In operations upon the uterus and appendages, I have many times found the center of the transverse colon lying at the level of the sigmoid flexure, both kidneys afloat, and not a single large viscus in the abdominal cavity in its proper position.

Numerous evils are the necessary outgrowth of these conditions which are attributable to their relaxed condition of the abdominal muscles. Of special significance are the mechanical displacement of the bowels and other organs which force the pelvic viscera backward and downward, the intestines slipping over in front between the uterus and the bladder. This, I am confident, is the origin of retroversion in not a small number of cases.

The displacement of the various viscera necessarily gives rise to abnormal tension upon the sympathetic nerves which run out into them through the membranous structures which anchor them to the pos-

teri or abdominal wall. Whenever the patient is upon her feet, these nerves are under constant strain, giving rise to reflex pains, and irritations of various sorts. This is the origin, in most cases, of the excessive backache from which so many women suffer when on their feet, and the dragging sensations through the hypogastrium. But more remote symptoms are equally common; particularly the distressing sensations at the vertex, the back of the neck and between the shoulders, pains in the limbs, and other discomforts.

But the most serious consequence of a relaxed condition of the abdominal muscles is chronic passive congestion of all the viscera below the diaphragm. The mesenteric and portal vessels are capable of holding all the blood in the body. An animal may be easily bled to death by tying the portal vein. It is bled into its own abdomen. When the portal and mesenteric vessels are over-filled, other structures suffer. The brain is poorly nourished; the muscles are anemic and necessarily weak, the skin is pale, and the whole body is brought into an enfeebled and disordered state. The chronic passive congestion of the pelvic viscera as a necessary consequence of the loss of muscular tone which permits nearly constant and complete relaxation of the abdominal muscles. Intra-abdominal pressure is diminished to such a degree that the chief obstacle to the indefinite expansion of the vessel walls is the thin structure of these walls themselves; and the consequence is a great accumulation of blood in the abdominal cavity, and particularly in the pelvic cavity. The permanent cure of nine-tenths of the chronic ills from which women suffer would be effected by the restoration of the normal balance of the circulation.

Uterine congestion can not possibly be cured by vaginal douches, the application of medicated pledgets, or by any other local procedure. The surplus blood of the abdominal and pelvic cavities must be gotten rid of. The normal support of the vessels must be restored. This can be accomplished in only one way, namely, by the development of the abdominal muscles, and the restoration of their normal tone.

The blood may be temporarily diverted from the pelvic and abdominal regions by muscular exercise. Hot baths, massage, and other measures divert the blood into the muscles and the skin, which together are capable of holding all the blood of the body, and which constitute two great reservoirs which may be used for the drainage of internally congested parts. But such derivative procedures must be more or less temporary in their effects. Although congested when active, the muscles again become anemic when at rest. The reddened skin holds an enormous amount of blood, but when the cause of the vaso-motor dilatation has been removed, the returning pallor indicates the return of the vessels to their usual state. By prolonged cold sitz baths and other procedures, the pelvic and abdominal vessels may be contracted, and thus the surplus blood may be driven into other parts. Great benefit may thus be derived from local hydropathic applications, but these applications must be repeated several times daily and during a long period to secure definitely beneficial results. Abdominal massage, by exciting the vaso-constrictors of the pelvic and abdominal vessels, lessens the congestion of the viscera occupying these parts, while at the same time raising the external blood pressure as shown by the sphygmomanometer. But the only positive and perma-

ment remedy for this condition is the development of the abdominal muscles and the restoration of intra-abdominal pressure. This may be readily accomplished in most cases by special exercises and by applications of electricity.

Leg raising exercises, with the patient in the supine position, practiced two or three times daily will, in the course of a few months, wonderfully increase the strength of the abdominal muscles; not only the strength, but also the tone of the muscles increases as the tissues approach a state of healthful vigor and activity. Walking upon tiptoe, hopping, jumping, rowing, and especially swimming, are most excellent exercises for the abdominal muscles. By special breathing exercises, the abdominal and pelvic vessels may be almost instantly, though temporarily, emptied. Deep breathing greatly assists the mesenteric and portal circulation. As the diaphragm descends, the viscera are compressed against the abdominal wall, thus forcing the blood along in its channels while opposing the further entrance of blood into the arteries. At the same time the air in the chest cavity being rarefied, the pressure upon the heart and the large vessels near it will be diminished, producing a decided suction effect upon the veins. If the abdominal muscles are well contracted, and compression is made upon the abdomen during inspiration, this effect is greatly increased. I usually instruct patients to practice breathing with the hands clasped over the abdomen while taking deep inspirations. The same effects may be produced by breathing while lying down upon the back with a shot bag or weighted compress lying upon the abdomen. A large water bag may be used for the purpose, or weights of any sort; or,

if the patient is very feeble, a nurse or other attendant may place both hands upon the abdomen while the patient breathes, the patient being instructed to force the abdominal walls against the hands of the nurse as firmly as possible.

Another method is to have the patient lie with the face downward, resting the upper part of the trunk upon the elbows with the head supported by the hands. In this position, the abdominal muscles are stretched, and the viscera are compressed. If the patient breathes deeply at the same time, a very strong compression is brought to bear upon the viscera, thus emptying them of blood.

An exercise which I employ, and which I find most effective of all, is to have the patient empty the lungs, then close the throat, and make an effort to inspire by raising the chest as high as possible, but without permitting any air to enter the lungs. This drags the viscera upward while at the same time decongesting them. If, at the same time, the hands are clasped and carried close along the body upward above the head as high as possible, the effect is still further increased.

Another excellent plan is to have the patient stand against a wall,—the heels, hips, shoulders, and head being held firmly against the wall,—and to breathe deeply in this position.

The application of electricity is an excellent means of developing weakened abdominal muscles. The static, the galvanic, the Faradic, or the sinusoidal current may be employed. The application must be made in such a way as to throw the muscles into vigorous contraction at frequent intervals, two to twenty times a second. The slowly alternating sinusoidal current administered by means of

suitable apparatus, is the most efficient way of securing rhythmic muscular contraction. I have employed a current of this sort for this purpose for the last fifteen years.

In most cases it is necessary, while the muscles are being developed, to have the patient wear a proper abdominal supporter. The old fashioned London supporter answers fairly well in some cases, and sometimes an ordinary flannel bandage is found sufficient; but in many cases a more efficient means of support must be employed. After experimenting with many different kinds of supporters, I had made a very simple supporter which acts upon the principle of the ordinary spring truss. This can be employed in all cases, and is as efficient in the case of thin persons who are not helped by supporters which are held in place by bands, as for fleshy persons. Almost any sort of bandage is more or less effective. In cases in which there is a decided forward stoop, the supporter is modified by the addition of shoulder straps and perineal bands by means of which the weakened spinal muscles may be assisted, and constitute a sort of natural body trainer, correcting the bodily deformity while the muscles are being developed.

In cases of visceral pain, either pelvic or abdominal pain, phototherapy may render very valuable service. Both the incandescent and the arc light may be advantageously employed. I use the incandescent light by means of a simple instrument, which I call a Photophore, which is applied to the hypogastrium, or the lower part of the back. The tissues may be by this means subjected to a much higher temperature than when moist heat is employed, and the heat is much more penetrating. The radiant energy passes for some distance into the tissues before

being converted by the resistance which they meet, into sensible heat.

The arc ray is useful not only as a means of applying heat, but as a convenient method of producing most effective counter-irritation, and hyperemia of the skin through which a powerful derivative effect is produced in relation to the pelvic vessels. The arc light may be employed either with or without the blue glass screen. When properly applied by the aid of a powerful light (20 to 60 amperes) and a concentrating reflector, solar erythema, the result of the special activity of the actinic rays may be produced with any desired degree of intensity.

The continuous application of both the incandescent and the arc lights produces more or less permanent hyperemia of the skin. The incandescent light produces the mottled appearance. The arc light produces a dark brown tint. The skin is tanned. The deeper structures of the skin are influenced, being stimulated to a high degree of activity, and increased vascularity.

I have not yet by any means exhausted my subject, though my paper has already reached a greater length than I intended. I will say in closing, that I trust the day is not far in the future when gynecologists will depend less upon the temporizing and palliative measures which constitute the larger part of our present gynecological practice, but will recognize that the most important thing to be done for a woman suffering from chronic pelvic ailments in a large proportion of all cases which come under observation, is to make her a well woman in general, relying largely upon the *vis medicatrix naturae* to correct local deviations from the normal condition. "Nature creates and maintains, therefore she must be able to heal."

REMOVAL OF VERMIFORM APPENDIX AND TREATMENT OF STUMP.

ANGUS McLEAN,
Detroit.

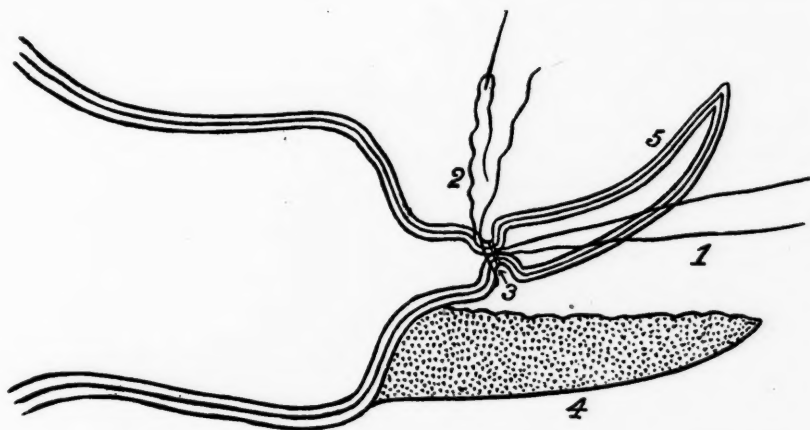
It is now only 20 years since the first operation for the removal of the appendix was performed, and only in the last decade has appendicitis become generally recognized as a surgical disease and being amenable to operative treatment.

In this short time many methods of removal have been advocated by different writers, but as yet no definite procedure has been adopted by the majority of operators, as different methods apparently give good results. The principal methods of removal of the appendix and treatment of stump have been the following: ligaturing the appendix near base, cutting it off distal to ligature and draining; cutting it off and stitching the different coats of stump separate; inverting the whole ap-

pendix, nitric acid, carbolic acid or thermo-cautery and then stitching serous layer over this; cutting the base of the appendix out of the cæcum and closing the opening as an ordinary wound of intestine; application of thermo-cautery to base and sewing of stump before inverting, and the use of crushing forceps and cautery.

The objects to be maintained in the operation are: prevention of escape of contents of appendix; prevention of sepsis; prevention of leakage from stump after removal, and the covering of the raw surface with peritoneum.

I have adopted a very simple method which I have used in the past two years with very satisfactory results. The appendix is freed from its mesentery back

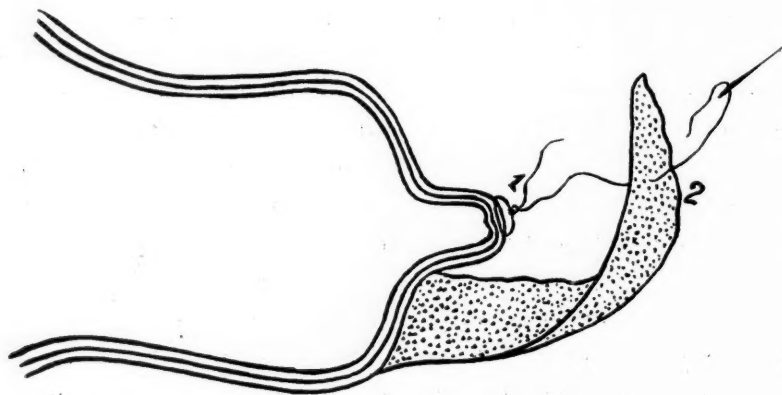


pendix into the cæcum and putting suture across base; removal of appendix near cæcum and inverting stump, using purse string suture; making a circular incision through serous coat and rolling it back like a cuff over the base; ligaturing the muscular and mucous coats, touching the mucosa exposed with

to near the base. A strong silk ligature is placed around the appendix at the desired point, including all the coats, and tied very tight. This constricts the appendix so as to form a prominent shoulder near the ligature. A purse string catgut suture is inserted through the serosa, well up on the shoulder (as shown in cut No. 1) and

drawn taut; the appendix is now removed with scissors just below the silk ligature, while the purse string suture is tightened. This brings the serous coat over the stump completely as the muscular and mucous coats roll in. The silk ligature comprises

I do not use acid or caustic of any kind on the stump, simply bring up the meso-appendix and cover it over. There are no stitches through or ligature around the muscular coat; I have noticed that the patients do not vomit so much or com-



the lumen so as to force all secretions from this point, frequently obliterating the mucosa, so that there is no danger of the escaping of secretion.

plain of pain to the extent they did when the muscular and mucous coats were ligated. I have followed this procedure in over seventy-five operations with the most satisfactory and gratifying results.

TRACHEOTOMY.*

J. A. HEASLEY,
Grand Rapids.

It is not the object of this paper to go into the technic of all the different features, of the different manners, in which the different kinds and methods of this operation are performed. But I will endeavor to give you a few points of interest bearing upon certain conditions.

Foreign bodies in the tracheal tract are invariably drawn in by suction. In a few

cases they enter direct, as in stabs and gunshot wounds. In some cases we have found portions of tissue lodged in the trachea as the result of rupture of an aneurism, or of an abscess. It is surprising, the different kinds of foreign material to be found in the trachea, lodged there by suction force.

Besides the different manners and positions in which these foreign substances are lodged, we find them lodged between the vocal cords, across the glottis, behind the epiglottis, in the ventricle, between the true and false bands, and in a great many

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cases they descend into the trachea or bronchus.

One very important feature of foreign body in the trachea is often overlooked, and that is a true diagnostic symptom. You must be able to diagnosticate between foreign body in the oesophagus and a foreign body in the trachea without a mistake. Frequently patients have been brought to me after hours of intense suffering, who had been purged and vomited until they were completely prostrated in trying to expel a foreign body from the oesophagus that was not there, but in the trachea. The slightest subjective symptom should have pointed out the location of the foreign obstacle, and suggested that something must be done immediately.

The symptoms of foreign body in the trachea and a foreign body in the oesophagus, are so widely different, that such a serious mistake need not be made. Where we have such symptoms as cough, strangulation, cyanosis, immediate, other symptoms developing more remote, we may rest assured of what the trouble is. Should we have a foreign body in the oesophagus, should the obstacle be a bone, a pin, a needle, etc., we would have pain in the immediate vicinity of its lodgment, but no difficulty with the functions of respiration. Should the foreign substance be a bolus of soft food, the oesophagus would be completely shut off, and by pressure on the trachea might cause some trouble with the functions of respiration.

To be sure of your diagnosis if the lodgment is high up, say above the interclavicular notch, just press firmly on the trachea with the front fingers. If the pressure that has interfered with respiration be a soft substance in the oesophagus, it will become flattened, and as you remove your hand from the trachea the

functions of respiration are resumed. Should the bolus be far down in the oesophagus, its pressure would not interfere with respiration, but there would be intense pain in the immediate location of the foreign substance.

Inspection, palpation and auscultation may aid you very materially in your diagnosis. Should the foreign body be deep in the bronchus, diminution or absence of the normal vesicular murmur over one entire lung would indicate partial or complete obstruction of one of the primary bronchi by some foreign body. Should this interference be limited to a portion of the lung only, then you would know the foreign body had descended into one of the subdivisions. Again, on the other hand, the opposite lung will be observed doing more work than its companion. Should the foreign body be small and hard, as a nut shell, pin, etc., you would have a sibilant or hissing sound heard very plainly over the point of lodgment. The foreign body may be movable, and cause a very loud, hissing sound in the region of the lodgment. Should the foreign body be lodged high up in the trachea, it can easily be located by passing the finger over the trachea externally. As soon as you reach the location of the foreign body with your finger pressing on the trachea, your patient suffers very acute symptoms. Remove your finger, and these spasmodic symptoms are soon gone.

Now that we have made a correct diagnosis, we will proceed to operate. Should the obstruction be high in the trachea, so as to require either the high or medium operation, it would be very simple, but should it require the low or extremely low operation, we would find ourselves confronted with a more serious proposition.

I will not consume your valuable time by going into details on the different

forms of this operation, as it would be, to a certain extent, repetition of book knowledge. The low, and more especially, the extremely low, operation deserves our most careful consideration. It does this from several standpoints. Not infrequently we are confronted with a case where a foreign body is lodged at the bifurcation or descended in one of the bronchi. Nothing is left for us to do but to operate.

Any physician who can cut and ligate blood vessels, can do either of the first two mentioned; but every physician cannot do the last two successfully—not even the author of this paper—but having done a number of the low operations, and some of the extremely low operations, with a reasonable amount of success, I will give you the following method by which I operated:

Before making an incision be sure the patient lies square on the back, the head extended straight with the body, and a little lower than the level of the body, so as to make the trachea and muscles of the neck more prominent. By so doing you are more forcibly reminded of your landmarks. We should use the precaution to make our first incision in the median line and exactly straight with the body, for a perfect and careful beginning might make this operation much easier than a rude beginning. We will begin our incision at the cricoid cartilage, and extend it downward to the inter-clavicular notch separating the sterno-thyroid muscle in the median line, carrying your dissection carefully down to the trachea, being careful to avoid the isthmus of the thyroid body and a branch of the inferior thyroid vein which lies immediately in front of the trachea. In some subjects you will find the anterior jugular vein in front of the trachea. Should that be the case in

your subject, be sure to doubly ligate it before dividing it. Now that you are down on the tube see to it that all hemorrhage has ceased. Make it a rule NEVER to open a trachea as long as the slightest hemorrhage exists. Better allow the sin committed against nature by an innocent person, to bear away that breathless and lifeless body, than have the stain of an unligated hemorrhage resting forever on your conscience-stricken memory.

The tube being now exposed, place your finger directly against it, moving it upward or downward, as the case may require, until you have the foreign body under your finger. Using the finger as a guide, push the knife down to the trachea, bifurcation of the trachea, or wherever the lodgment may be. Make an incision sufficiently large to remove the obstruction, which can usually be done by any common forceps at hand. The patient being relieved of his suffering, now breathes as calmly as if nothing had ever happened.

Allow the relieved patient several minutes' rest before proceeding to repair your incision. In stitching up the trachea, I make an effort not to puncture the walls of that organ, lest your ligature might act as a foreign body on the inner surface of the tube. Stitch the muscular tissues from right to left over the trachea, which will bring the divided tracheal surfaces in correct apposition. Another precaution well to be observed is, be careful not to include a branch of the pneumogastric in your suture, as it might cause you serious annoyance later.

Cast not thine eyes to yonder mountain,
Whose plains are fertile and green—
For in its midst lies hidden
A monstrous enemy unseen—
Unseen to human eye,
Unknown to all but heaven,
It awaits thy early coming.
Be on thy guard, my brethren!

CANCER OF THE RECTUM.*

J. A. McMILLAN,

Detroit.

As an introduction to a short paper on this subject, I wish to emphasize three points:

First—That Cancer of the Rectum is a comparatively frequent disease. I call attention to this matter of frequency, because the medical profession do not seem to realize this fact, that rectal cancer is as common as cancer of the stomach and *five times* as common as cancer of all the rest of the intestines.

Second—The second point is that the diagnosis of malignant disease of the rectum, even in its incipency, is not difficult, for the entire rectum may be inspected and a large portion of it palpated.

Third—The third point is that a large majority of rectal cancers permit of total extirpation and that without subjecting the patient to any very formidable operation.

It seems to me that a consideration of these facts cannot but increase our sense of responsibility to these patients.

I am convinced that with the improved methods of rectal examination and operation, we can do much more for their relief.

The important essential is "early diagnosis." We seem to forget, when we consider cancer of the rectum that in every case there was a time when only a very small portion of the mucous membrane was involved; a time when in size, mo-

bility and extension, it was comparable to a hemorrhoid. This was the time of choice for operation, but, to our discredit, we must confess that it is rarely that we see a rectal cancer before it has involved all of the coats of the bowel and extended to the surrounding tissues; thus, it is, that cancer of the rectum when recognized is a terrible disease. Nothing but the most formidable operation can offer any hope of relief and the results from radical operation are such that a sentiment prevails against any interference.

How can these lamentable conditions of affairs be improved? The answer is "early diagnosis and radical operation." Now, unlike cancer of the stomach and cancer of many other internal organs, cancer of the rectum may be recognized early and easily. Then again, when a rectal cancer is small, it may be excised by a minor operation, devoid of danger, and without injury to any important structures. Accordingly, I regard early diagnosis of malignant rectal diseases particularly important.

In order that cancer of the rectum may be recognized at a stage when the medical profession can be of some assistance and can promise years of relief and a proportion of cures, there must be more frequent rectal examinations. If we were as familiar with the proctoscope as we are with the nasal or vaginal speculum, early diagnosis of rectal cancer would be the rule.

Physicians do not make rectal examinations as frequently as they should. This is due in part, to a certain amount of reti-

*Read before the Section on Surgery, Ophthalmology and Otology at the annual meeting of the Michigan State Medical Society at Grand Rapids, May 26, 1904, and approved for publication by the committee on publication of the council.

cence on the part of both patient and physician, but I am convinced that the real reason is that a false belief prevails among general practitioners that the rectum is generally immune from disease, that with the exception of hemorrhoids, disease rarely attacks the lower eight inches of lower bowel. Fissure and fistula are not common and cancer is not often seen. When the physician considers that these constitute a complete category of rectal diseases, it is not surprising that examinations of this organ should be infrequent.

Now, the point I wish to make here, the consideration of which would lead to a greater frequency of rectal examination and to earlier diagnosis is, that disease in the rectum *is common*. In this connection, I wish to draw attention to the frequency of chronic congestion and irritation, not only because I believe due appreciation of the part it plays in producing symptoms which often receive a mistaken interpretation, but also because it is quite possible that it has an etiologic relation to rectal cancer. The chief symptom of this condition of the rectum is constipation. I believe the dilated blood vessels, increased redness and mucus found in these cases often are misinterpreted as due to chronic inflammation. It has been demonstrated that a large percentage of cases of chronic constipation depend upon pathological conditions in the rectum, such as chronic inflammation, congestion, diseased rectal valves, etc.

Within the last month, I had a case that illustrates the point I want to make:

A woman, 60 years of age, consulted me for the relief of constipation, which she considered to be the cause of her excessive nervousness. She said that she had suffered occasionally for several

years with piles, but that they were never very troublesome and a little ointment given her by a physician gave relief during the attack. Upon examination, I found several small hemorrhoids at the muco-cutaneous junction. In one of these hemorrhoids I found a cancerous growth. Now, I had no thought of finding a cancer when I undertook this examination. The examination was for the purpose of discovering, if possible, the cause of constipation. The valvular portion of the rectum was congested, the superficial veins swollen and some mucus present. This is the condition commonly found to be present in cases of chronic constipation. Now, this condition responds readily to treatment and there is prompt relief of constipation.

I argue that in every case of chronic constipation, a thorough rectal examination is obligatory. In 100 cases of chronic constipation that consulted me, I found one case of incipient malignant disease, one case of rectal polypus, and one small suspicious growth upon the lowest rectal valve, which I removed. This patient was operated upon at Harper Hospital, May 26, 1902, for very stubborn obstipation. A small growth, the size of a small bean, was found on the margin of the valve. It was red and bled easily. It was removed at the time of the valvotomy and microscopic examination did not reveal any cancerous tissue.

I urge these considerations, the frequency of congestion and irritation in the upper rectum, the dependence of constipation on these conditions and the prompt relief afforded by treatment, in order that more frequent rectal examinations be made, and that incidentally, incipient, malignant disease may be discovered.

There is another bearing that chronic irritation in the rectum may have upon rectal cancers. It is now conceded by many authorities that chronic irritation is an important etiologic factor in producing malignant disease. Accordingly, in these cases, we not only are able to treat effectually the constipation, but, at the same time, we have a right to believe that by the removal of these chronic irritations, we are employing the best known methods of prevention of rectal malignancy.

By means of modern methods of rectal examination, every portion of the rectal mucous membrane may be inspected and portions of suspected growth removed.

MICROSCOPIC EXAMINATION.

What I wish to emphasize, in this connection, is the facility of doing these two important things. A proctoscopic examination is not painful unless there is abnormal sensitiveness about the anus and when the proctoscope is inserted, every portion of the rectum may be examined except the anal canal. This important region cannot be examined by the ordinary proctoscope or anoscope, because, when these instruments are withdrawn sufficiently to bring the lower portion of the mucous membrane into the field of observation, the sphincters contract vigorously and force the instrument out. To obtain a better view of the anal mucous membrane, I have had a fenestrated anoscope made. This is used in the same way as the ordinary anoscope; its use is not painful and it affords a good view of the anal mucous membrane. By means of this instrument, portions of tissue for microscopic examination may be easily obtained. Digital examination is of the greatest importance, in the recognition of the nature of rectal diseases.

In regard to the treatment of rectal cancer, I wish to state what cannot be said of malignant growths in any other portion of the gastro-intestinal canal, viz: in its early stages, it may be completely excised without a major operation.

In the case mentioned above, where the cancerous growth developed upon a small hemorrhoid, the operation consisted of "excision" rather wider, but not more dangerous or difficult than that for an ordinary hemorrhoid, and the operation completed by drawing the mucous membrane together with fine catgut, no dressing was left in the anal canal but a firm pad was applied externally. Growths in the upper portion of the rectum may be excised through a proctoscope.

In May, 1902, a woman, age 55, consulted me for the relief of a very stubborn constipation. Upon rectal examination, I discovered a small, wart-like growth upon the margin of one of the rectal valves. I operated at Harper Hospital May 26, 1902. By means of a long shepherd's crook needle, I passed a ligature on either side of the growth, leaving plenty of room for wide excision and with a long scissors removed it. I consider these scissors, the invention of Dr. Hirschman, to be superior to any other cutting instrument for operations on the mucous membrane in the upper part of the rectum. The operation was completed by securing the ligatures already passed by shot, which controlled hemorrhages and made good coaptation of mucous membrane. Microscopic examination did not reveal any cancerous cells in this case, but this should not affect the operative technique. In such cases, you obtain tissue for examination and do a sufficiently radical operation at the same time.

I believe that it is advisable to remove all such rectal growths. It may be found that they are benign, but it is consistent with modern views of cancer, to regard with suspicion even benign growths, especially when located in a region subject to persistent irritation. This case emphasizes and illustrates what I tried to emphasize in connection with the first case reported—"That the growth was discovered incidentally while making a rectal examination for the cause of constipation."

A question arises here as to the rapidity of growth in rectal cancers in the early stages. That growth in the earliest stages, is not very rapid, I believe is a fact in most cases and then I believe we are justified on stating, that in the very great majority of cases chronic irritation and inflammation exist for a length of time before the development of the cancer, and these give sufficient local or general disturbance to demand from a careful physician a rectal examination.

A third case was Mr. H. H., Brown City, Mich., referred to me through the courtesy of Dr. Campbell. The patient, age 65, was greatly reduced in flesh and for over two years had suffered from some rectal disease, which he had concluded was hemorrhoids. In this case, the entire circumference of the lower two inches of the gut was cancerous but only one small patch of the peri-rectal tissue was involved. The operation, performed at Harper Hospital, January 4th, 1904, was very much like a "Whitehead" operation, care being taken to remove as much as possible of the tissue around the rectum. Microscopic examination demonstrated this to be squamous-celled cancer, which accounts for its slow growth and for its limitation to the mucous membrane. In this case, the sphincters were retained. The mucous membrane was brought down and sutured to the skin. The patient's bowels moved on the eighth day and he was able to walk about at the end of the second week, and at this time defecation was painless.

A CASE OF COLITIS WITH TREATMENT.*

F. HOLMES BROWN,
Newaygo.

The subject of colitis is not treated at any length in the ordinary text-books on medicine and I find after careful reading that it is not frequently encountered by the ordinary practitioner. That is the reason that prompts me to report the following, not with the idea of reporting a

cure or bringing forth any new plan of treatment, but with the hopes of obtaining new light myself on the subject and getting a free discussion. Now, with no further introduction I will report the case.

J. C., female, Irish American, 34 years of age. Has been married 19 years. Mother of seven children; 1894 first noticed pain and discomfort along course of transverse and descending colon and never since that time has she been free from dis-

*Read before the Section on General Medicine at the Annual meeting of the Michigan State Medical Society at Grand Rapids, May 27, 1904, and approved for publication by committee on publication of the council.

comfort there. Patient has always been of a constipated habit. From the date of first attack she has been passing mucus casts similar to photograph exhibited. These were small at first, mere shreds in fact as patient describes them "little white specks in stool." These kept on increasing in size until about March 1st last. Casts were passed fully ten

occur. At times she has been confined to her bed for weeks.

On November 1st, 1903, she became worse, and was confined to bed until March 15th, when she began to improve quite decidedly. November 19th had severe continuous pain and passed about two quarts of a dark brown fluid which proved to be a mixture of pus and broken



inches long and varying in size from a lead pencil to my index finger. The photographs exhibited were taken from some, taken shortly after this, but were broken up pieces; five years ago operated on for uterine disease, nature of operation not known.

Her condition has from the beginning at times improved and then relapses would

down blood. Also on 20th passed a small amount; evidence at this time of a localized peritonitis as well. Temperature 102°, pulse 90, respiration 25. Peritonitis limited to left half of abdomen.

This condition lasted three weeks and gradually disappeared.

Condition of patient March 1st, on assuming charge of case, severe pain and

marked tenderness over line of transverse and descending colon. On palpation no tenderness over liver, spleen, bladder or kidneys. No rectal trouble beyond a couple of small internal hemorrhoids, subacute cystitis, a severe endometritis, severe frontal headache, foul breath and evidence of catarrhal gastritis. Inability to move bowels without copious enemas of hot water which would be followed by hard fecal masses coated with mucus and large numbers of mucus casts. Gave patient 5 grains salol every three hours. Table-spoonful doses of olive oil after meals, $\frac{1}{4}$ grain protoiodide of mercury every three hours, and morphine sufficient to quiet pain, $\frac{1}{4}$ grain twice daily; patient soon began to improve under treatment and left her bed on the fifteenth with casts less in number, pain very slight and not constant, and general condition improved. Only small mucus shreds passed at this

time and these were few, pain entirely disappeared, but tenderness remained at junction of transverse and descending colon. March 21st gave full dose magnesia sulphate, causing several large loose stools, and since that time up to present she has had natural stools with only an occasional dose of the salt. Appetite has increased, gastritis and cystitis have disappeared under the ordinary treatment. Endometritis has somewhat improved, but is not yet well; patient still has some pain and passes few casts now and then. Examination of casts under microscope show few cells from lining membrane of intestine but the main mass is nothing but pure mucus. In drying they practically disappear, leaving only a very small residue.

I trust that all who have encountered a similar case will give me the benefit of their experience.

CLINICAL CASES.*

J. G. LYNDS,
Ann Arbor.

I have four rather unusual and interesting cases which I wish to report today under this heading.

First—A Fibroid Tumor with absence of uterus and vagina, and only one rudimentary ovary of all the internal organs present.

HISTORY: Mrs. A., age 45 years, married 19 years, never pregnant, has never

menstruated or had any periodical disturbance that could be referred to the pelvic organs. Was in good health up to three years ago when she noticed an enlargement in the lower part of the abdomen immediately above the pubes. Since that time it has been steadily increasing in size, and now extends above the umbilicus. Appetite and digestion fair, bowels costive. Has been getting nervous for the past two years and is now very much so. Has some distress from pressure and some soreness, but no severe pain.

*Read before the section on Obstetrics and Gynecology at the Annual meeting of the Michigan State Medical Society at Grand Rapids, May 26, 1904, and approved for publication by the committee on publication of the council.

EXAMINATION: General appearance good—nothing to attract attention or unusual—chest negative. Abdomen enlarged, hard, and nodular over its lower portion, enlargement extending two inches above the umbilicus and down into the pelvis.

External organs—Labia major and minor, clitoris, meatus and vestibule perfect—no os, vagina, nor any indications of vagina by rectal and bimanual examination. Growth filling the pelvis so it was impossible to get any idea of the presence, absence or condition of the internal organs. A diagnosis of a rapidly growing fibroid was made and an operation offered for its removal and the formation of a vagina. The offer for the removal of the tumor was accepted, but that for the formation of a vagina was rejected. A few days later I opened the abdomen and found the expected fibroid, but could find no trace of uterus, tubes or ovaries. The tumor was undergoing cystic and colloid degeneration and was attached to the bottom of the cavity where the uterus should have been. Ligation beneath it was comparatively easy, there being no broad ligament on either side so its removal was not difficult. Microscopically there was no sign of uterus, tubes or ovaries in the specimen or patient. Dr. Warthin in examining the specimen discovered what he believed to be one rudimentary ovary but no sign of tubes or uterus. The vagina was entirely absent also.

The patient made a rapid and uninterrupted recovery and returned home in three weeks feeling quite well.

This case is interesting because of the fact of her having married and lived a happy and contented life without any marked nervous or other disturbances, un-

til the tumor developed, without vagina, uterus or ovaries; the sexual relations having apparently been satisfactory as they were in ignorance of any abnormality until a short time previous to their consulting me, although married 19 years. The case is also interesting because of the fibroid growth occurring in the absence of the internal organs.

CASE No. 2.—A case of Pseudo-hermaphroditism. On December 1st, 1903, Miss C. consulted me and gave the following history:

Age, 26; single; school teacher; family history, good; father and mother well; has brothers who are well; was strong and well up to 11 years of age, at which time had chorea, after which development ceased for three or four years and from that time on was slow; has never menstruated but for the past year thinks she has had a periodical disturbance occurring every three or four weeks, consisting of backache, feeling of fullness in the pelvis, headache and other indefinite nervous symptoms; says she has a growth on the external parts which she wishes removed.

EXAMINATION: Patient 5 ft. 3 in. in height; weighs 112 pounds, rather masculine in appearance and walk; has coarse black hair, quite abundant; some coarse black hair on face, evidently shaves, general outline of masculine type. Mammary glands and fat absent, areola and nipple small of decidedly masculine type, considerable hair on abdomen and thighs. The external organs were absent with the exception of the meatus urinarius and an enormous clitoris, measuring two and a half inches in length and two inches in circumference, the glands and prepuce of which resembled the penis to a marked degree. The meatus was two-thirds of an inch back of the base of the clitoris and

rather hard to find. There was no trace of labiā or os vaginæ. The urethra was four inches in length. The nurse said that in catheterizing her she once passed the instrument in six inches and got no urine, but on withdrawing it and passing it in again got the urine at the ordinary depth. This has suggested to me the possibility of a rudimentary vagina opening into the urethra, but I failed to find it if present at the time of operation.

Under anesthesia I found by bimanual examination, the broad ligament, over which I could hook my finger and in the center of which was a nodule about $\frac{1}{4}$ the size of a virgin uterus. On the left side on the posterior fold was a small nodule which I took to be a rudimentary ovary, but could not discover a corresponding one on the right side. There was, however, a small nodule in the region of the inguinal canal, an enlargement which might have been a small ovary, testicle or an enlarged lymphatic.

After making the examination, I explained the condition to the patient and her mother and advised that nothing be done as no operation could make her as she desired to be. They both insisted on having the enlarged clitoris removed and a vagina made. I explained the probable failure of any attempt to make and keep open a vagina under the existing conditions, but they still insisted on the attempt being made, and insisted so hard that I finally consented to make the experiment, and on December 4th, operated. I first removed the clitoris by stripping off what skin and mucous membrane I could, to be used in lining the vagina, cutting it off, ligating the vessels and covering the stump over with the surrounding skin. Then I made an incision in the

median line immediately posterior of the urethra being guided by a sound in the bladder and a finger in the rectum; I dry dissected a finger's length or until I thought the canal as near the peritoneum as it was safe to go. This I dilated until three fingers could be introduced, brought in the flaps removed from clitoris and the surrounding skin, stitched them to the top of the canal and packed it tightly with iodoform gauze. Four days later I removed the gauze and substituted a glass plug four inches long and one inch in diameter, which passed in very readily. I kept her in bed three weeks and kept the plug well in place, at the end of which time the canal remained well open and the skin flaps were well united, but changed to more nearly resemble mucus membrane. When she had been up a couple of days I accidentally heard she was contemplating marriage in the near future, and I plainly told her what the probable result would be should she carry out such intentions. She left the next day without my knowledge and went home. A few weeks later I saw a newspaper containing the announcement of her wedding. Again a few weeks ago I heard through a party who lives near them that she and her husband seemed to all outward appearance to be living together happy and contented. What the future outcome may be, time alone can tell.

In the December number of the American Journal of Obstetrics, which came out about two weeks after I operated on this case, there is an article by J. Riddle Goffe describing a very similar operation. In his case the external organs and a rudimentary vagina were present, however, while the condition of the internal organs is not stated.

VAGINISMUS: Mrs. K., age 26 years; married three months; puberty at 11; periods normal in amount without pain, and regular; should have had one two weeks ago which has not appeared. The first time she has ever gone over time. For past ten days has had nausea and eructations of bitter material. Says she had a similar condition three months ago which lasted two or three weeks. Has always been very nervous: Says that sexual intercourse has been impossible for some reason; that such attempts are very painful and make her very nervous. That she has no sexual desire since being married, although she did have before. She was in an extremely excited and nervous condition and declared she would be divorced or commit suicide. In order to quiet her and give her confidence I assured her she could be cured and induced her to have an examination. The extent of this, however, was to separate the labia and inspect the vestibule, hymen and os vaginæ which was very small, the hymen very tense and unruptured. Any digital or instrumental examination was impossible, and the slightest touch of the parts would cause spasms of the whole body. It was difficult to keep her on the table to make the little examination I made, and she made so much disturbance, she frightened some who were in the waiting room so they went away and even attracted the attention of those passing on the street.

I advised her that her condition could be relieved by an operation and treatment, but as there was a possibility of pregnancy she had better wait, for if this proved true she would probably be all right after her confinement. She declared she did not want children, that if

pregnant she would suicide, that she would not remain with her husband anyway.

She proved to be pregnant, and several times came to my office and tried to induce me to operate for the condition of the hymen and to empty the uterus, both of which I refused to do.

Whether or not she went to others, as she said she would, I do not know; but if so she had nothing done for she went to term, was delivered instrumentally with little trouble, made a good recovery, and was entirely relieved of her trouble; even the sexual appetite returning. When the first child was fifteen months old I delivered her of a second. The most interesting points in this case are the extreme nervous condition produced in the patient; the undoubted occurrence of pregnancy without intromission and the complete recovery after pregnancy and labor.

CASE No. 4.—Mrs. S., age 24; married one year; has always been well but rather nervous; had never had occasion to consult a physician before. Puberty at 14; periods sometimes slightly painful, but nothing of account, and sometimes irregular.

She consulted me in September, 1903, on account of an enlargement of the abdomen. She gave a history of absent periods for four or five months and gradual enlargement.

I examined the abdomen and found an enlargement filling the lower part of the abdomen, reaching above the umbilicus; made out the foetal heart and diagnosed pregnancy about five months advanced. She was so extremely nervous I did not attempt a vaginal examination.

Her husband questioned my diagnosis because as he said they never had

been able to have intercourse. The diagnosis was correct, however, and things progressed fairly well to time of confinement, which occurred on December 3rd, four months after my first examination. I was called early, and without making any examination directed the nurse to make the usual preparation, went away, returning a couple of hours later when she informed me she had been unable to do more than give her a bath, as any attempt to clean the vulva caused a convulsion. I attempted it myself, but had no better success than the nurse, the slightest touch to the parts causing a spasm of the whole body. I then administered chloroform while the nurse prepared the parts, after which I made an examination. I found the vulva normal, the hymen relaxed; the os vagina patulous so three fingers could be introduced. The husband told me he had been able to introduce two fingers himself, although intromission had never been possible. There certainly was no anatomical obstruction present. The cervix being well dilated I applied forceps and delivered, there being some laceration of the perineum. This I did not repair more than to stitch together the skin and mucous membrane purposely leaving the muscles separated with the hope that the hypersensitive and spasmodic condition would more surely be relieved.

Convalescence was normal, but all through it the nurse had great difficulty in cleansing the parts. Six months later the husband came to me and told me that things were no better than before, and at my request brought her for examination. This I made with great difficulty, the patient shaking and trembling so I was almost impossible to control her; almost

jumping off the table when the vulva was touched. I finally ascertained that the vagina was well open, admitting two fingers without trouble, and that the other organs were in good condition, with the exception of a slight laceration of the cervix. I continued local treatment until I could introduce a large bivalve speculum without trouble and with practically no pain nor spasm of the parts, but when any attempt at intercourse is made the spasmodic condition returns and it results in failure.

I have had her change climate, separating her from her husband for months; have given her tonics and nerve sedatives, used cocain locally, morphine generally and done everything I thought likely to benefit the condition, but all alike have resulted in failure.

The woman is absolutely without sexual desire, in fact dislikes and dreads the attempt; says it is impossible for her to prevent the general contraction of the muscles which takes place, or the involuntary drawing away.

I believe her husband is not without fault in this case, however, for he admits an inability to satisfactory erections and to preautre ejaculations.

I have treated many cases for conditions similar to those present in this patient, but this is the only one I have failed to relieve, which I may yet be able to do, however, for she has improved in many ways during the past year.

The case is of interest because so obstinate; because of the probable occurrence of pregnancy without intromission and because of the absence of any improvement of the conditions after pregnancy and confinement or by treatment.

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MARCH, 1905

Editorial

THE NOMINATION OF A PHYSICIAN FOR UNIVERSITY REGENT.

On Feb. 14th, the Republican Convention, on first roll call, nominated Dr. W. H. Sawyer, of Hillsdale, as its candidate for Regent of Michigan University. His opponent was Mr. Chas. Lawton, of Lawton. The vote was 683 to 305—Washtenaw not voting, though its representative moved the vote be made unanimous.

The political party balance in Michigan makes republican nomination equivalent to election. But the case is made even stronger by Dr. Sawyer's popularity over a large portion of the State. All recognize his personal fitness for the peculiar duties of a University Regent. Then the place sought him rather than he the place—another item in his favor. His friends believe that he better than another at the present time is fitted to serve all the people in the place of Regent.

It is recognized that the broadest view should be taken in the conduct of the University; such view is impossible that overlooks the physician. His scholastic training and professional life give him a deeper insight into the best ways of growing good citizens with a minimum of waste. He will help his colleagues on the Board of Regents to see with his eyes many important things otherwise passed

by, just as they will help him with their peculiar education and active life.

In the past the application of the doctor's peculiar technical training has been limited to his immediate neighborhood; now the time has arrived for him to aid in solving larger questions of State—Dr. Sawyer's nomination shows that Michigan recognizes the situation.

Since the medical profession supported his nomination, it will give closer attention to University management—to the advantage of all concerned. Because the profession is behind him, Dr. Sawyer will be stimulated to merit its approval.

The above vote shows that practically all the people are with the movement, thus endorsing its fitness, and giving promise of support of its selected representative.

This mass of people desire first and all the time such conduct of the University, as will ensure the graduation of none unable to earn an honest living by supplying some of the multiform needs of society. No parent wants his child a "wall flower" in the activities of life. That Dr. Sawyer will materially assist in the realization of this object is well known.

The organization which made possible the present medical law, and nominated Dr. Sawyer for Regent, must commend itself to its friends and gain the respect of the indifferent. It has still other duties to perform, as the elimination of the University's influence in promoting "pauperism" and the "spirit of graft" among the people by offering free professional service to the "well-to-do" at the University hospitals. (See editorial February *Journal Michigan State Medical Society*.) But an awakened profession, people and Board of Regents, will find a practical method to solve the problem wisely.

We need to remember the sharp distinction between our work with other citizens, and that entirely our own. Thus, as citizens, we join with other citizens in selecting and regulating boards of health; in helping to draft laws regulating the practice of medicine; in managing state institutions as the University, etc. In this capacity we helped to nominate Dr. Sawyer as Regent.

As doctors we have a State Society with branches in every county; to develop these to the utmost is our especial work. Its perfection will determine our influence in measures affecting all the people.

To maintain our present position, with constant improvement thereof, it is necessary for members of each branch to pay dues promptly in advance; to contribute something to every meeting of said branch; to seek out the indifferent or antagonistic and bring them into a branch; to close the lips to unfriendly public criticism of any brother doctor, reserving this for a private interview; to always speak well of fellows in public.

The Michigan State Medical Society is strong as its members meet these obligations.

TO THE PROFESSION IN MICHIGAN.

Doctors are the only class of business men doing business on a basis of almost universal and always indefinite credit. The lawyer either collects his fee in advance or withholds it from moneys passing through his hands. The merchant gives even short term credit only to those who are financially responsible, and therefore collectible. The very nature of a physician's work precludes a definite financial understanding except in opera-

tive cases because he cannot anticipate the amount of service necessary in any given case or predict with certainty its outcome, hence he is accustomed to extend credit to all except those who have previously imposed upon his kindness and casts freely "Bread upon the waters" in the shape of his time, knowledge, experience and skill.

Ingratitude is one of the vices of the present age and the doctor receives more of it than any one else, simply because no other business man puts himself so freely in the way of receiving it. The turkey eaten last Christmas, the last year's hat and the illness of the year before are no longer esteemed or appreciated, but the turkey and the hat are paid for while the doctor who was a fool to wait so long anyhow still insists that he ought to be paid.

Then the ungrateful patient reasons that if he was sick the doctor made him sick or kept him sick, in fact, he has never been really well since, hence the doctor owes him instead of vice versa. From this mental process evolves a threat of suit for malpractice unless the doctor cancels his charge and donates his services. It is a notorious fact that nearly all of the many threats of action for malpractice arise in precisely this way through dissatisfaction, real or imagined, with services rendered a considerable time before and unappreciated because not paid for. The ungrateful patient finds a ready excuse for dissatisfaction in the impaired health following serious illness, the lack of perfect function incident to a fractured joint, or the unexpected tardy convalescence following operation, all factors utterly beyond the control of the physician who has displayed at least the average amount of knowledge and skill

which is all the law asks or expects him to do. Actual malpractice comes promptly to suit but these bluff combinations of the ungrateful patient and a shyster lawyer organized for revenue only, hold the threatening club over the medical profession for the whole three years which the law of this state allows.

Our committee on legislation have a bill pending in the present Legislature which limits the time during which suit for malpractice must be begun to one year, a law which exists already in some six sister states. The Society at its last meeting instructed this committee to introduce and work for such a bill and it is demanded and expected that every doctor in the state will do his utmost to aid its passage by bringing all possible influence to bear upon his own member of the House or Senate. The bill will have the opposition of a certain class of lawyers and possibly of some rural constituencies or labor interests and the cry of class legislation will undoubtedly be raised against it.

On the other hand every country but ours exacts an indemnity bond as a requisite to a suit for malpractice and the doctor in Michigan who of all its citizens is alone subjected to this annoying menace is entitled to ask from the state such legislation as will protect him against blackmail and threat while in no way restricting the right to redress of the individual who has a legitimate claim for damages.

One year gives ample time for the person really injured to bring suit, gives the doctor a fair chance of defence before his witnesses are scattered or dead and debars most of the blackmailing threats arising only from mercenary motives.

As before said, the most efficient influence in behalf of this needed measure can be exerted by the members of the county societies upon their own legislators. Steps are to be taken to bring this matter before each county society, but the individual member should not wait for such action. A pledge of support from your legislator whom you personally can influence will do more for the pending bill than the most beautiful resolutions passed by your society. Do not delay but get busy!

BACILLI OF THE DYSENTERY GROUP.

In many countries scattered widely over the world, certain more or less closely allied bacteria, not known to be normal inhabitants of any part of the gastro-intestinal tract, have been isolated from the dejecta of persons exhibiting dysenteric and diarrhetic symptoms, and from the mesenteric contents, mucosa, and mesenteric glands of those dying of these diseases. Although the intestinal discharges from patients suffering from other diseases, and those of normal persons, have frequently been investigated, organisms, corresponding to these in type have not as yet been found.

These organisms can be separated into four groups by fermentation tests:

Group

I

"Shiga"

"Kruse"

"New Haven"

(Ferment dextrose.)

Group

II

"Y" (Hiss and Russell)

"Seal Harbor"

"Diamond"

"Ferra"

(Ferment dextrose and mannit.)

Group

III

"Strong"

(Ferments dextrose, mannit, saccharose.)

Group

IV.

"Harris"

"Gray"

"Baltimore"

"Wollstein"

(Ferment dextrose, mannit, maltose, saccharose dextrin.)

Bacillus

Typhosus

(Ferments dextrose, mannit, maltose and dextrin.)

Philip H. Hiss* has shown that bacilli isolated from cases of dysenteric and diarrheic diseases fall into the four groups shown above, that these groups can be separated from each other and from the typhoid organism not only by fermentation tests but also by their agglutinative characters.

**The Journal of Medical Research*, December, 1904.

THE X-RAY AS A STERILIZER OF MEN.

Dr. F. Tilden Brown (*Medical News*), says: "In the last few days ten individuals who have devoted more or less time to X-ray work during the past few years—none of whom have any venereal disease or traumatism involving the genital tract—have been found the subjects of absolute azoospermia. None of the number are conscious of any change or deterioration in regard to their potency."

This statement is supported by reports of other cases—as a patient known to

have active spermatozoa before treatment by X-rays for puritus ani, did not have them after the treatment nor did they reappear till many months thereafter.

Farther attention is directed to the effects of the X-ray on lower organisms. Thus Albers-Schonberg has produced aspermia in rabbits by exposing the abdomen to the X-rays.

Halberstaedter has found changes in the ovaries of rabbits, essentially the disappearance of the Graafian follicles at the end of fifteen days.

There seems reason to accept Dr. Brown's statements as essentially correct. If so, additional caution in the use of the X-rays will be indicated.

The sociological bearing of these observations are obvious. It is pertinent to inquire about the sterility of the many X-ray operators. Possibly they may have been rendered sterile and are unaware of their changed condition—so preventing a legitimate increase in their families.

If finally found correct, it will take the place of spaying—and probably be less expensive.

As a prevention of conception it will be ahead of the old methods, and can be operated on the male rather than the female.

Seriously, it makes evident that the properties of the X-ray for evil are not fully understood, and so emphasizes that X-ray operators were wise to proceed cautiously into the realms of the unknown. Else suits for damages may spring for the harm they have unwittingly done on some hapless person, and scientific medicine suffer harm at the hands of its friends.

COPIOUS WATER DRINKING IN TYPHOID FEVER.

The free use of water internally is accepted generally as important in the treatment of typhoid fever. During the last year and a half, Edward F. Cushing* has conducted some interesting experiments in a number of typhoid fever cases at the Lakeside Hospital, Cleveland. He had given large amounts of water to his patients at frequent intervals. It was found that most of these patients could take four ounces of water every fifteen minutes during waking hours, amounting to from eight to fourteen pints in twenty-four hours. In addition the ordinary patient received every two hours during the day and once or twice at night, alternately six ounces of milk and six ounces of albumen-water. These large quantities of water were well borne. The amount of urine passed in the twenty-four hours after admission was found to be about twenty ounces. After forty-eight hours, or by the end of the third day, there resulted a daily elimination of from eight to twelve pints. In some cases there were two gallons or more of urine. The polyuria was readily kept near this level in uncomplicated cases during the febrile part of the illness.

By this treatment, it was found that fever baths had to be given and that the general comfort of the patients seem apparent. Headaches were not so troublesome; tongues and mouths were noticeably clean and moist; apathy, deafness, restlessness, nocturnal delirium and the nervous and toxæmic symptoms seemed less; nausea was unusual, and remissions in temperature appeared more frequent.

**The American Journal of the Medical Sciences*, Feb., 1905.

The mortality was lower and the complications were fewer in those patients whose urinary elimination was above 160 ounces daily.

The following conclusions were reached:

1. Large quantities of water internally, a gallon or more in twenty-four hours may easily be taken by typhoid fever patients, if administered in small quantities at frequent and definite intervals.
2. A copious elimination of watery urine at once follows, the degree of polyuria, day by day, closely corresponding to the quantity of fluid ingested.
3. Patients are more comfortable by this mode of treatment and toxic and nervous symptoms are lessened.
4. The mortality, as well as the severity, of typhoid fever, seems to be still further diminished by this method of hydrotherapy employed as an accessory to the cool-bath treatment of the disease.

DOES THE MEDICAL PROFESSION NEED MORE MEDICAL SCHOOLS?

The College of Physicians and Surgeons of Los Angeles was incorporated Nov. 23d, 1903. About the same time was born the *Los Angeles Medical Journal*—a monthly with editors from the faculty of the above medical college. The journal and college thus have a common origin. Formerly this combination was common, but of late years it has been less fashionable. In the interests of the medical profession we wish this new birth had not taken place, but that rather the surplus capital and brains and energy had been added to the working power of medical colleges already existing in California. The medical colleges of this state are not

overburdened with either cash or students or teaching force. Every well-posted doctor knows that the undue multiplication of medical colleges and journals has operated against the interests of the great mass of the medical profession. If organization ever becomes a power the mass of the profession will forcefully ask that medical colleges and journals without the capital in any direction to make them able to train doctors in touch with modern medicine be not duplicated and their originals be closed. A patient profession has borne long with these enemies to its best evolution. Parasites of its life blood will be wiped off; those who seek to live by preying upon the profession will be invited to adopt measures to earn an honest living.

An organized medical profession can accomplish what individual reformers and "Elijahs crying in the wilderness" have failed to do. Let us have such a profession as can defend itself from all schemes and schemers against its honor, and capacity to command the respect of the laity. Better, not more medical colleges and journals is the need of the twentieth century. Better and fewer doctors is the need of the hour.

Ponder these things as you work for better organization.

County Society News.

GENESEE COUNTY.

The Genesee County Medical Society held its regular meeting in Flint, January 24, 1905. The bill for the establishment of a state sanatorium for the tuberculous was unanimously indorsed. C. S. Wheeler, of Flushing, was elected delegate and A. S. Wheelock, of Goodrich, alternate.

H. R. NILES, Sec'y.

INGHAM COUNTY.

The regular bi-monthly meeting of Ingham County Medical Society was held at Lansing January 12, 1905. H. A. Hays was elected delegate to the state meeting, J. F. Campbell alternate.

F. N. Turner, Webberville; S. H. Culon, Mason, and C. D. Bleck, Lansing, were appointed a committee to work with the special committee of the Michigan State Medical Society to secure an appropriation from the state legislature to establish a sanatorium for incipient tuberculosis.

The committee on service at the U. of M. Hospital were not ready to report. They were instructed to draft resolutions and forward to the university regents. The committee is L. D. Toles, O. H. Freeland, A. D. Hagedorn. The sentiment of the society is strongly against free medical and surgical services to those able to pay for same.

O. H. Freeland, of Mason, reported a case of elephantiasis of the penis with specimen.

Abstract:

The pathological specimen was removed from the under surface of the penis of a patient 19 years of age. There seems to be no doubt that it is of congenital origin. The growth being at birth the size of a small bean. The attending physician, thinking that in time it would disappear, did not attempt its removal. The tumor never caused any pain; but slowly increased in size, was soft and flaccid and not unlike the surrounding structures to which it was attached by a broad base.

Its removal was accomplished without pain under a local anaesthetic injected along the line of incision and around the cornea glandis. The operation being the ordinary one for circumcision, with the addition of extending an incision posteriorly in order to include all of the growth.

I was at first inclined to believe it a papillomatous growth; but after showing it to several authorities, I was convinced that it was a case of elephantiasis.

Text-books give very little space to growths of this variety and we may judge that they are of rare occurrence. Cases are reported as occurring in warmer countries, where they affect certain parts of the female sex, especially the labia majoria, and here the tumor reaches such a size as to extend down to the knees or ankles.

In some cases elephantiasis is supposed to be due to a parasite called *filaria sanguis*, introduced into the blood by means of the mosquito bite.

The patient from whom this tumor was removed has always lived in Michigan.

A microscopical examination will be made later and then I hope to report the same to this society.

L. W. Toles, of Lansing, read a paper on Fractures and Dislocations of the Wrist.

Abstract:

In introducing this subject for your discussion I will not enter into minute details or unusual complications, as time is limited and more particularly as under this head would be included that common and important injury known as Colles' fracture of the radius. This, from a clinical standpoint, is of such vast importance that I will but briefly allude to some of the less frequent conditions which would come under this heading. The injury next in importance to Colles' fracture is backward dislocation of the wrist joint, due to a fall upon the palm resulting in deformity which simulates that of fracture but in an exaggerated form. The important diagnostic difference is that in dislocation the normal relations of the styloid process of the radius and ulna are preserved, whereas in fracture this prominence in the radius is carried to a higher level than its fellow as shown by a comparison with the sound side. Forward dislocation is extremely rare, the symptoms are the reverse of those that indicate a backward displacement.

Dislocation at the lower radio-ulnar joint may be produced by forcible pronation or supination as in wringing clothes or by direct violence. Dislocation of this joint exists perhaps more often than is generally supposed as a complication to Colles' fracture of the radius.

The os magnum is the only carpal bone likely to be displaced and is usually the result of a crushing injury to bones and soft tissues. The treatment of the various dislocations of the wrist is usually simple and reduction is effected by applying force in a direction opposite that which produced the dislocation, together with traction and firm pressure over the abnormally prominent surfaces in which position the parts are to be retained by a suitable dressing.

The powerful ligaments which form a part of the joints of the wrist usually resist more force than does the radius, hence instead of a dislocation we almost invariably have a fracture of the lower end of the radius. This condition known as Colles' fracture was first described by Dr. Colles, a Dublin surgeon of considerable note.

In point of frequency Colles' is classed as second, being exceeded in number only by fracture of the clavicle. It is usually the result of indirect violence, being produced by a fall upon the palm of the hand forcibly extending the wrist with consequent giving way of the bone at junction of the hard compact portion with the soft spongy articular end. The line of fracture is from $\frac{1}{4}$ to 1 inch from the articular surface and usually transverse. Sometimes the line may be oblique, including the whole diameter of the bone or may include but a portion of the articular surface, in which case the fracture is intra-articular and more prone to ankylosis.

The lower or distal fragment is usually driven back by the forcible extension and very often comminuted or impacted. This fact will account for the so frequent absence of crepitus.

It is not common to have a compound fracture in this region, excepting in crushing injuries to bones and soft parts.

The ulna has no direct relation with the wrist joint, consequently is scarcely ever broken, but, as has already been stated, the extreme extension and displacement very often results in a dislocation of radio-ulnar joint in conjunction with the fracture of the lower end of the radius. This point, I believe, is often lost sight of, and is the cause of bad results in many cases.

Another complication which may exist is the breaking off of the styloid process of the ulna and displacing of the fragment to such an extent as to make complete recovery impossible and occasionally calls for the subsequent removal of the detached portion of bone.

When the fall is upon the back of the hand, as is sometimes the case, the fragment will of course be displaced in an opposite direction.

The symptoms of Colles' fracture are usually characteristic and diagnosis easy, but a careful examination should be made in all doubtful cases. This is best accomplished sitting in front of and facing the patient who has *both* forearms bare and placed in an exactly symmetrical position.

If Colles' fracture is present the following points will be noticed:

The hand is bent toward the radial side so that a line drawn through the axis of the forearm passes through the fourth finger instead of through the second one as on the sound side. The styloid process of the radius will be more prominent than on the sound side, and by comparison with the styloid process of the ulna will be displaced upward toward the elbow.

By inspection from the side we note a projection on the palmar surface and depression on dorsal aspect of the wrist corresponding to the end of the radius, or, as it is sometimes described, a bayonet projection due to the backward displacement of the lower fragment. As we view the whole hand, forearm and wrist we can usually make out the well known table fork deformity as described by the French authors.

There may be absence of the usual symptoms of ordinary fracture, as well marked crepitus or abnormal mobility.

The *one* important sign which we should *always* bear in mind in *this* as in *fractures in any locality*, is marked tenderness upon *palpation* exactly over line of fracture.

In some cases it may be difficult to differentiate between fracture and dislocation. The distinguishing difference is the shortening in fracture. This can be detected by measurement of the forearm and hand from the tip of the olecranon process over the dorsal aspect to the tip of one of the fingers compared with the sound side, when, if fracture exists with displacement, there will be shortening; whereas, a dislocation will either not change the length or will increase it.

The *prognosis* of injuries of the wrist depend very largely on the treatment. An uncomplicated Colles' fracture properly reduced and treated almost invariably results in complete recovery. When the line of fracture is oblique or extremely so, the difficulty of retaining the broken ends in normal position is greatly increased, consequently the prognosis more obscured.

In cases where the line of fracture involves the joint surface, the liability of *ankylosis* is much increased and is liable to supervene unless care is exercised to prevent it.

We should always give a guarded prognosis in cases of complete traumatic dislocation, for the joint capsule and some of the ligaments are always torn either through their continuity or at their bony origin or insertion, and very often recovery will be prolonged or sometimes incomplete.

Injuries to joints from a clinical standpoint are always to be looked upon as more serious than fractured bones, and I might add that we have but few fractures in any part of the body which do not involve one or more of the neighboring joints as well as soft tissues. One of our best authorities has, by compiling statistics, shown that on the average fractures with injuries to neighboring structures, require from twelve to fourteen months' time for complete recovery.

The complications which result in unfavorable or delayed results, are displacement of fragments, stiffness of neighboring joints, hypertrophy of the callus, delayed union, pressure on nerves, persistent pain, and oedema of the limb. These facts should stimulate our attention to details in treatment not only of compound but simple fractures and dislocations.

The *treatment* of fractures and dislocations of the wrist is, of course, not unlike that in other regions of the body excepting wherein it would be influenced by the anatomical differences.

In Colles', where the line of fracture is transverse, there is but little tendency to re-displacement if the fractured ends are perfectly coapted, consequently the kind of retention splint or dressing is not of so much importance as the perfect reduction of the deformity. This is best effected by direct pressure while strong traction is being made with the hand forcibly bent toward the ulnar surface. It is best when possible to have two assistants who may be members of the family or household, one grasps the patient's arm above the elbow while the other grasps the fingers with one hand and the thumb with the other, making the traction and forcibly bending the hand as indicated, while the surgeon with fingers over the prominent end of the palmar side and thumbs on the displaced fragments of the dorsal side, can usually effect perfect reposition.

This is one of the *few* fractures where an anesthetic can sometimes be employed to the best possible advantage on account of the liability of impaction of the fractured ends, and the necessity of overcoming muscular contraction in effecting perfect reduction. In this respect we should consider this an exception to the rule as in most fractures better results can be attained *without* the struggling incident to giving an anesthetic than can be expected with its employment.

If the line of fracture be oblique more care must be exercised in retaining the fragments.

In selecting a form of dressing or splint we are of course to be influenced by the materials at hand as well as the kind of fracture, habits and occupation of the patient, etc.

The properly padded board in form of anterior and posterior splint, fulfils the indications quite well if wide enough to prevent side pressure on the bones of the forearm. I will speak of the various forms of ready made splints only to condemn them unless they be of a flexible material susceptible of being moulded to fit the given case. I am firmly convinced that the ready made splint has done more harm than can

be estimated. To illustrate this, I wish I might be able to bring before you a case which recently came to me wearing one of these beautifully carved implements with the information that I might keep it until the patient had recovered, but as beginning pressure, necrosis and malposition of the fractured bones existed, I returned the splint by first express. I am happy to say, however, that it did not come from an Ingham County physician.

A favorite form of dressing with many, including myself, is the plaster cast applied while the hand and the forearm rest on the patient's knee in the proper position after the reduction is effected; the plaster is applied to the posterior side and allowed to dry, when an anterior half can be added and the two held in position by a few turns of a roller bandage. The advantages of this splint are that the limb may be easily inspected and that it fits the limb perfectly. Dr. Moore, of Rochester, has devised a dressing which incorporates only about three inches of the wrist corresponding to the seat of injury which would be sufficient in most cases if the patient were never to sleep, drink or fall, but after a trial I concluded it unsafe and have abandoned its use.

Undoubtedly one of the most frequent and serious mistakes made in the treatment of fractures is that of immobilizing joints for too long a period after accident. All splints of whatever kind or locality should be removed at least every seven or eight days for inspection of the parts. In Colles' fracture the retention dressing can usually be left off at the end of three weeks, when active motion of the joints with daily massage of all the involved structures should be practiced.

Massage is one of the most valuable agencies at our command in hastening repair of damaged structures and with a few moments' instruction from the physician some member of the family can be made to render most valuable assistance.

One more important rule which we should always observe in the treatment of Colles' fracture is to *never immobilize the fingers* in any form of dressing. Allow the splint to extend only to the base of the fingers, leaving them free to active and passive motion. There is no question but that lots of damage has been done by fixing the tendons which pass by the injured wrist joint during the inflammatory stage of repair.

L. ANNA BALLARD, Sec'y.

MENOMINEE COUNTY.

The Menominee County Medical Society held its annual meeting and elected the following officers:

President—R. G. Marriner, Menominee

Vice-President—E. Grignon, Menominee.

Sec.-Treas.—R. A. Walker, Menominee.

Director for three years—H. A. Vennema, Menominee.

Delegate—C. R. Elwood, Menominee.

ROBT. G. MARRINER, President.

MONTCALM COUNTY.

The first quarterly meeting of Montcalm County Medical Society was held at Greenville, January 12, 1905.

The Michigan State Nurses' Association was recognized by the following resolution:

"Be it resolved and recommended by the Montcalm County Medical Society, that the registration of trained nurses is of value; that the state of Michigan should grant such registration to those nurses who by a course of study and training in hospital, shall show their competency to perform their duties to the full satisfaction of the physician and patient."

There was no action taken on the free clinic question connected with the university.

The society, by motion, expressed itself in favor of the amendment pending in the state society, relative to the house of delegates, viz., that the power to vote be limited to the delegates elected by the component county societies.

The society, further by motion, expressed itself in favor of dividing the medical course in Ann Arbor, so that at least a portion of the clinical course be taken in Detroit, where there is more abundant clinical material.

By motion, the society recommends that the legislature of the state, establish a sanatorium for the treatment of incipient tuberculosis, said sanatorium site to be selected with especial regard to climatic and soil conditions which especially exist in this section of northern Michigan.

F. R. Blanchard, of Lake View, was elected the delegate to the State Medical Society, and W. P. Gamber, of Stanton, was made his alternate.

A. W. Nichols read a paper on abdominal surgery.

Abstract:

The doctor reviewed quite extensively the history of abdominal surgery and the various

opinions held as to its antiquity. He said that abdominal surgery was looked upon as a very grave operation by his instructors of thirty years ago, and certainly such men as Frank H. Hamilton, Samuel D. Gross, Thomas, Emmett, Hunter, Ward, Lewis A. Sayer, Markoe, Post, and many other surgeons who have been the founders of American Surgery, are deserving of our consideration.

Senn, and men of his wide experience, urge abdominal surgery in almost every disease of the abdomen, including dropsy, peritonitis, uterine and ovarian diseases, disease of the appendix, obstruction of the bowels, many kidney ailments, diagnosis of stomach difficulties, diseases of the biliary tract; and his latest advice is to open into the abdomen for tubercular troubles, either of the omentum or intestines.

The medical profession have rather a tendency to go to extremes. The old practitioner delighted in his large doses of boneset and calomel, and the liberal use of mercurial ointments, until it was about as dangerous to have a doctor as it was to get well without his aid.

Upon this aggressive method of treatment grew the Eclectic System of medicine, guaranteed not to loosen a tooth. But yet the doses were large and nauseous. And then sprung up Homeopathy and its infinitesimal doses. And now we are in the great wave of abdominal surgery, and operations must be performed. Therapeutics and rational practice of medicine have lost their foothold and must give over to the liberal use of the knife. Pretty careful reading and a continuous practice of years lead me to believe that the knife is doing more damage than good, although I am a firm believer in its judicious use.

I was called upon to see a lady a short time ago. Her daughter wanted to know if I thought it would not be advisable for her mother to be operated on and have her ovaries removed. I said, "Where did you ever hear anything about that?" "Oh," said she, "I have had mine removed." "Do you know of anyone else who had their ovaries removed?" "Yes, there are four young married ladies all of whom I am acquainted with and who are my neighbors." I asked her what city she lived in at the time and who performed the operation. Although I am well acquainted with the physicians of that city, I never heard of this physician or surgeon.

It was but recently that a patient came to me from outside who was suffering from a slight bilious attack and nothing more, who said that her physician advised her to go to the hospital and he would remove her ovaries.

The leading surgeons are not to be found fault with in this respect, and I do not know that the beginners are. Unless the physician can perform laparotomy, not only can but does, his opinion is valueless. There is danger in abdominal surgery. The slight pick of a pin or needle may produce blood-poisoning. Those who know could reveal a history or present a panorama of results of meddlesome abdominal surgery, unskilled surgery; aye, even of skilled surgery sometimes, that would be most appalling.

I do not know but it may be necessary that a special statute be enacted appointing a Board of Censors, who shall determine the advisability of these important operations. We thought there had been too much power conferred by the Constitution on our Governor, and so a Board of Pardons was provided by Legislative Enactment.

The paper was discussed by Drs. Blanchard and Black favoring liberal abdominal section while Drs. Avery, Nelson and others thought there should be more of a tendency to conservatism.

NEWAYGO COUNTY.

The Newaygo County Medical Society held its annual meeting and elected the following officers:

President—N. DeHaas, Fremont.
 Secretary-Treasurer—F. H. Brown, Newaygo.
 Delegate—N. DeHaas, Fremont.
 F. H. BROWN, Sec'y.

OSCEOLA COUNTY.

The Osceola County Medical Society held its annual meeting. The following officers were elected:

President—J. W. Newcomb, Reed City.
 Vice-President—A. Holm, Ashton.
 Secretary-Treasurer—T. F. Bray, Reed City.
 Delegate—A. Holm, Ashton.
 T. F. BRAY, Sec'y.

SANILAC COUNTY.

The Sanilac County Medical Society held its annual meeting January 23, 1905. The following officers were elected:

President—D. D. McNaughton, Argyle.
 Vice-President—J. E. Campbell, Brown City.
 Sec'y-Treas.—G. S. Tweedie, Sanilac Centre.
 Delegate—J. S. Little, Sanilac Centre.
 Alternate—G. Simonton, Marlette.
 G. S. TWEEDIE, Sec'y.

WAYNE COUNTY.

The Wayne County Medical Society held its regular general meeting January 31, 1905.

James E. Davis read a paper entitled, "Immediate Detection of Injuries to the Birth Canal Resulting from Child Birth,"

Summary:

1. Immediate detection of birth canal injuries is most frequently not observed because of the indisposition on the part of the attending physician.

2. A clear knowledge of the pelvic anatomy is of the utmost service in determining the importance of each injury.

3. Immediate detection of the precise injuries precludes early repair, which possesses every possible advantage to the patient and is the duty of the obstetrician.

4. The methods of detection and plan of classification of these injuries are of little practical use if not made clear and simple to all who do obstetrical work.

The plan to have the state legislature make provision for the establishment of a state sanatorium for consumptives was presented and the Society passed a resolution endorsing the plan and a committee of three was appointed to assist the M. S. M. S. committee in their work.

H. W. Yates gave the history of a case of persistent anuria and asked the members present for some help in the case.

A motion was made and passed that the Society endorse the action of the A. M. A. in becoming incorporated.

WILLIAM G. STAPLETON, JR., Sec'y.

The Surgical Section held its monthly meeting January 23, 1905.

Ray Connor read a paper on "Recent Work in Ophthalmology." This paper appears in full on page 66 of the February issue of the Journal.

In opening the discussion, Leartus Connor said that the writer is certainly right in saying that there has been no important research and no epoch making discovery during the past year, yet in the thousands of pages which have been written, much has been gained in filling in the gaps of our knowledge and in correcting former mistakes.

Physics plays a more important rôle in ophthalmology than in any other branch of medicine and the importance of a careful study of this science should be encouraged.

It is noticeable that the number of workers in the specialty have rapidly increased as have also the number of special journals.

Ophthalmology has suffered like other branches of medicine, from the enthusiasts. Gould says that 99 per cent. of the cases of migraine can be cured by the proper correction of refractive errors. While his enthusiasm has carried him beyond the limits of observed facts and logical reason he has drawn attention to what has been known for many years that refractive errors have much to do in causing many functional and some organic diseases—both in and outside the eyes.

Don Campbell said that no work needs more careful attention than that of refraction. It is quite a recent idea that refractive errors are at the bottom of certain organic lesions of the fundus. If this be true, poorly fitted glasses may cause much mischief.

Vernal catarrh is a form of conjunctivitis which is especially chronic and rebellious to treatment. Recently it has been looked upon as a local manifestation of a constitutional affection and its treatment with salicylate of soda has given very good results.

The use of dionin, an alkaloid of opium, to stimulate the lymph secretion of the structures around the eye and within the eye-ball, has been a decided step in advance.

Methyl alcohol poisoning has been on the increase because the manufacturers have recently found a method of deodorizing it and substituting it for grain alcohol.

Fleming Carrow said that it is well to stop now and then and take stock of our knowledge; hence the value of a paper like Dr. Connor's.

Recent methods of photographing the fundus will add much to our exact knowledge. The difficulty along this line, heretofore, has been in obtaining a focus on the concave surface of the retina.

Subconjunctival injections seem superfluous for we can apply our remedies directly to the inflamed surface.

Emil Amberg discussed "Some Points of View as to the Time to Perform Myringotomy and the Mastoid Operation."

Abstract:

Of practical importance is the opposition recently raised against the incision of the drum membrane in acute suppuration of the middle ear. Professor Buerkner intended to test the claims of the ultraconservatives on 50 cases but he had not the heart to continue the palliative treatment

after he had watched 44 cases, and he returned to the rule practised by him for 25 years, viz.: to create as soon as possible a passage, in cases which have violent pain, considerable fever and partial or complete bulging of the reddened drum membrane. Koerner has also shown the advantage of early myringotomy many years ago.

The essayist expressed the opinion that a fixed rule can not be established for all cases of mastoiditis because many factors are present and at work, the importance of which can not be estimated correctly. The power of resistance of the tissues, the character of the microbes, their virulence and ability to produce toxins can not be measured by the thermometer or the watch. Also the variations in the anatomical configuration of the mastoid process can not be determined with certainty from the outside. The author divides the acute form into three groups: Mastoiditis acutissima, acuta and subacuta.

In case of doubt whether to open a mastoid or not, we should remember that we can never be too early but by hesitating we may be too late. An antrotomy in acute mastoiditis can be compared to a myringotomy in acute, suppurative otitis media. The views (on the mastoid operation of several authorities) were stated.

Don Campbell commended the early opening of the tympanum in acute middle ear suppuration and also the early performance of the mastoid operation. In reply to Dr. Bell's question as to what is meant by "early," Dr. Campbell said that the operations should be done as soon as the diagnosis can be made.

Leartus Connor stated that the time for operation can not be measured by days nor by hours but as soon as the case ceases to improve operation must be advised.

R. B. Canfield, of Ann Arbor, read a paper "The Treatment of Chronic Empyema of the Antrum, Both Simple and When Combined with Empyema of the Ethmoid and Sphenoid."

Abstract:

Forty per cent. of all cases of antral disease are simple, that is are not combined with disease of other accessory sinuses. In the other sixty per cent. a favorite combination is with disease of the ethmoid and sphenoid. In combined cases the treatment of the antrum includes the treatment of the other cavities affected. Attention should be paid not only to the treatment of the local condition but also to the general health. A course of tonic treatment and personal hygiene often yields gratifying results in obstinate cases.

Empyema is a disease of extension, arising either from infection from a carious tooth, or by extension of some disease process from the nose, syphilis, tuberculosis and malignant growth being excepted.

The line between conservative and radical surgery of the accessory sinuses has been too sharply drawn. The best results are secured by careful attention to details of treatment required in each case. The first step is to learn definitely the exciting cause. If it be a carious tooth, it is to be removed together with any diseased bone in its neighborhood. From this point on the treatment should be carried on through the nose. Treatment through the alveolar process is generally only a waste of time. It is applicable to those cases only in which the antrum alone is diseased and must be considered insufficient as soon as it is learned that other cavities have been attacked. Again any communication between the antrum whose resistance against additional infection is lowered and the mouth cavity, the secretions of which are laden with pathogenic germs of all kinds, is to be deprecated. The patient must wear an obturator in his mouth for the rest of his life if the opening is to remain permanent or he must be in danger of a recurrence if the wound be allowed to close. Then too, the drainage of pus into the mouth has a bad effect both upon the patient's nervous condition and upon his general health.

The intra-nasal method is the best, and includes the removal of all pathological nasal conditions which can either interfere with proper nasal respiration, or act as sources of infection and reinfection, as do adenoids, tonsils and polypoid turbinates. Proper nasal respiration is most important as it draws not only air but also secretion out of the sinuses. The antrum may be entered through the inferior or middle meatus. The inferior is generally to be chosen. An opening three-quarters of an inch by one-half inch is made by means of an electric drill, and the antrum is thoroughly irrigated, and dried by means of air heated to as high a temperature as can be comfortably borne by the patient. Stress is laid upon leaving the cavity thoroughly dry after each treatment. Care should be taken not to splinter the bony lateral wall of the nose nor to force bits of bone into the antrum.

If the ethmoid is diseased it can be reached by removing the anterior end of the middle turbinate and the uncinat process, after which small ethmoids can be fairly well cleaned out through the nose.

The condition of the sphenoid can be learned by catheterizing it through a slender canula. When its orifice can not be seen on account of a deviation of the septum or hypertrophied turbinate, it can still be reached by passing a soft silver canula along the cribriform plate to the posterior naso-pharyngeal wall. It can then be irrigated, if diseased, any obstructing deviation or turbinate must be removed before beginning to treat it. Its treatment is practically the same as that of the antrum.

If the case proves obstinate, every means should be tried to learn the cause, including the use of the X-ray. If more radical measures are necessary the Luc-Caldwell operation should be tried. This operation can be done under local or general anæsthesia, and includes resection of the facial wall of the antrum through the opening of which the diseased tissue in the antrum can be removed, and the ethmoid and sphenoid treated. The opening into the nose should be enlarged and the after treatment carried through it. The buccal incision is sutured for primary union if the pathological condition will allow. If the buccal incision can not be closed the after treatment can be shortened by skingrafting the antrum. Later the wound should be closed.

The duration of the after treatment depends upon

- (1) Size and shape of the sinus.
- (2) General condition of the patient.
- (3) Character of the infection.
- (4) Character of the pathological change.
- (5) Combination with disease of other sinuses.
- (6) Attention to details of treatment.

Wadsworth Warren, in opening the discussion, said that the intra-nasal method of attacking the antrum is the proper one. I believe that the amputation of the anterior portion of the middle turbinate is necessary to admit of free drainage. Few of us are able to discuss the paper, for there are few who can operate on more than the anterior ethmoidal cells. I never but once have introduced a probe into the sphenoidal sinus.

I believe that the points brought out are of great importance. The operation should be done intranasally rather than through the alveolar process. An opening through the latter can not be kept patent. I believe that the rhinology of the future will frown on any other than the intra-nasal method.

Willis Anderson: I especially wish to commend the intelligent conservatism expressed in the paper and am favorably impressed by the advocacy of the intra-nasal route.

I always take advantage of an opportunity of studying the relations of the accessory sinuses. We have in them a continuous line of cells which may open into one another in a variety of ways, hence it is very easy for infection to travel from one set of cells to another.

The principles of establishing free nasal drainage and free nasal breathing are important in treating affections of these cavities and if the anterior part of the middle turbinate is taken away, the drainage is more satisfactory.

Ideal cure is not always possible but if the symptoms can be relieved we have often done as much as is practicable. It is better to be conservative and relieve the symptoms than to be radical and produce deformities.

B. R. Shurly: Disease of the accessory sinuses is one of the most interesting conditions with which the rhinologist has to deal. Much of the work regarding it is still in the experimental stage and there are various views concerning it. We rarely meet with cases which require radical operation. By more conservative methods we may relieve the symptoms, viz.: (1) neuralgia; (2) purulent discharge, and (3) the development of polypi. If we can relieve these we need not proceed further.

Washing out the antrum can be done at once and will relieve those cases which are of recent origin. In case there is a canal, already prepared by the extraction of a carious tooth, the insertion of a canula and a few weeks of irrigation will bring about a cure.

In the great majority of cases the very radical operation as practiced on the continent is not necessary.

R. E. Loucks stated that surgical interference should be determined by the etiologic factor. Sixty per cent. are due to carious teeth and 40 per cent. to intra-nasal causes. The rule should be, when there are carious teeth, attack from the mouth; when the cause is nasal, reach them from the nose. I have seen no bad results from the treatment by a canula introduced through the alveolar process.

P. M. Hickey said: One should early determine as to whether the infection is from the mouth or from the nose. The prognosis is better when from the nose.

In a case which I have recently seen, a radiograph showed an abscess with necrosis of the root of a tooth next to the one which had been extracted, showing that the source of the trouble had not been reached. Certain of the cases in

which the infection is from the mouth do well. Each case should be most carefully studied as to the etiologic factor and treatment directed accordingly.

B. R. SCHENCK, Sec'y Surgical Section.

Miscellaneous.

NEWS ITEMS.

A bill to appropriate \$300,000 to the Free Hospital for poor consumptives at White Haven, Pennsylvania, has been introduced into the State Legislature of Pennsylvania. Of this sum \$100,000 is for the maintenance of the sanatorium at White Haven; \$100,000 to assist in the erection and equipment of new buildings to increase the capacity to as near 300 beds as possible, and \$100,000 to assist in purchasing a site at a suitable location and in erecting buildings for the care of more advanced cases of tuberculosis than can be accommodated at White Haven.

A bill has been introduced into the New York legislature, making an appropriation of \$90,000 for additional cottages for patients at the Craig Colony for epileptics. The census of the colony at present exceeds 1,000. There are more than 700 applicants on the waiting list who can not be admitted from lack of room. If the amount asked for becomes available, buildings for 200 additional patients can be put up.

A bill has been introduced into the New York legislature that directs that New York shall provide a hospital and a competent staff of physicians to deal with the treatment of persons rendered mentally or physically incompetent by the excessive use of alcoholic liquors, opiates, or narcotics. It also directs that the mayor shall appoint three physicians to serve in the hospital which is to be supported out of the money collected for excise taxes. Commitment to this hospital is to be made on the sworn statement of a father, mother, or some other relative or friend of the person addicted or by a city magistrate. The new hospital is designed to take the place of the present alcoholic ward at Bellevue Hospital.

A bill has been introduced into the Kansas legislature allowing the University of Kansas to

give clinical instructions in medicine at the various State Hospitals and also at Kansas City where a hospital site and some \$25,000 have been given for it. If this bill becomes a law the medical department of the University will give its scientific and didactic work at Lawrence in the regular laboratories and then send its students in sections to take practical work in the hospitals.

Dr. William T. Councilman, professor of pathology in the Harvard Medical School, disputes the findings of the Roswell Park Commission in its study of cancer, which were to the effect that cancer can be cured by a serum. The doctor stands by the findings of the Harvard experts who recently came to the conclusion that cancer is amenable only to surgical procedure.

Dr. Livingston Farrand, Professor of Anthropology at Columbia University, has been named as the head for the current year of the National Association for the Study and Prevention of Tuberculosis.

When the term of Senator Ball, of Delaware, expires on March 3rd, the medical profession will be left with but one representative in the United States Senate, Senator Jacob H. Gallinger, of New Hampshire.

E. R. Squibb & Sons, of Brooklyn, has been incorporated. Mr. Theodore Wercher, who was formerly the senior partner in the firm of Merck & Co., is the president of the corporation. Drs. E. H. and C. F. Squibb retain their interest in the firm and Dr. Edward H. Squibb is the chairman of the board of directors.

The semi-annual meeting of the Medical Society of the Missouri Valley will be held in Kansas City, March 23, 1905. An invitation has been extended to the Presidents of the State Associations within the territory embraced by the Missouri Valley.

Professor J. P. Remington, one of the editors of the United States Pharmacopeia is quoted as asserting that drugs 100 per cent. pure would be a thing of the past in this country with the assurance of the forthcoming publication. He says, "We shall recommend in this publication that pure drugs are not absolutely

necessary. For instance sulfate of quinin 99 per cent. pure is just as good and effective as one absolutely pure, and it does not make any difference what that other 1 per cent. is so long as it is not injurious. Now that it is recognized that chemicals need not be chemically pure we intend to introduce harmless foreign substances."

The office of a genito-urinary "specialist" in New York City was raided recently by the police and the two "doctors" and a clerk in charge were locked up in the Tombs. The evidence by which the indictment was secured was based mainly on an investigation conducted by C. S. Andrews, counsel for the County Medical Society. It was learned by the assistance of a detective, who posed as a wealthy western woman that nearly \$10,000, the saving of a life time, had been mulcted from a carpenter who was being treated for alleged Bright's disease by means of "radium." This was supplied in ounce bottles, costing the victim \$1,500 each and which required frequent renewal. Analysis of the solution of course showed no trace of radium. When the arrest was made, thirty-five well-dressed women were waiting in the sumptuously furnished reception room of the "doctors'" office.

CHANGE IN MEMBERSHIP.

(Jan. 15 to Feb. 15.)

NEW MEMBERS.

R. W. Alton, Portland, Mich.
T. S. Barclay, Detroit, Mich.
H. M. Best, Ludington, Mich.
G. G. Burns, Fremont, Mich.
J. G. Conner, Ionia, Mich.
G. L. G. Cramer, Owosso, Mich.
C. C. Dellenbaugh, Portland, Mich.
H. E. Emmert, Detroit, Mich.
Jas. E. Ferguson, Belding, Mich.
D. Fleischauer, Reed City, Mich.
Chas. Freiberg, Bay City, Mich.
W. A. Grant, Lyons, Mich.
W. R. Grant, Lyons, Mich.
J. C. Grosjeau, Pinconning, Mich.
F. L. Hoag, Hubbardston, Mich.
B. F. Horner, Lake Odessa, Mich.
J. S. Ingram, Bailey, Mich.
F. A. Johnson, Greenville, Mich.
J. M. Jones, Bay City, Mich.
N. D. Kean, Ishpeming, Mich.
Louise Lypp, Detroit, Mich.
D. McClung, Portland, Mich.

D. W. McFadyen, W. Bay City, Mich.
W. D. McHugh, Ewen, Mich.
F. M. Marsh, Ionia, Mich.
F. B. Marshall, Muskegon, Mich.
M. T. Moore, Richmond, Mich.
F. Morse, Sebawa, Mich.
J. W. Newcomb, Reed City, Mich.
P. Van Riper, Champion, Mich.
R. S. Rowland, Detroit, Mich.
C. W. Snyder, Clyde, Mich.
C. M. Swantek, Bay City, Mich.
S. D. Swantek, Detroit, Mich.
J. N. Swartz, Detroit, Mich.
Max Vardon, Hillsdale, Mich.
A. E. West, Eaton Rapids, Mich.
A. R. Williams, Brookfield, Mich.

CHANGE OF ADDRESS.

J. H. Andrus, Negaunee, Mich.
L. L. Goodnow, Michigamme, Mich.

DIED.

A. F. Hagadorn, Bay City, Mich.

BOOKS RECEIVED.

INTERNATIONAL CLINICS. Volume IV. Fourteenth Series. J. B. Lippincott Co., 1905.

A TEXT-BOOK OF LEGAL MEDICINE. By F. W. Draper, A. M., M. D. W. B. Saunders & Co. Philadelphia, New York, London. 1905.

PRACTICAL PEDIATRICS. By Dr. E. Graetzer. Translated by H. B. Sheffield, M. D. F. A. Davis Co. Philadelphia. 1905.

EYE, EAR, NOSE AND THROAT NURSING. By A. E. Davis, A. M., M. D. and Beaman Douglas, M. D. F. A. Davis Co. Philadelphia. 1905.

A COMPEND OF THE DISEASES OF THE EYE AND REFRACTION. By G. M. Gould, A. M., M. D. and W. L. Pyle, A. M., M. D. Third edition. P. Blakiston's Son & Co. Philadelphia. 1904.

A PRACTICAL TREATISE ON NERVOUS EXHAUSTION. By G. M. Beard, A. M., M. D. Edited by A. D. Rockwell, A. M., M. D. Fifth edition. E. B. Treat & Co. New York. 1905.

TRANSACTIONS OF THE STATE MEDICAL ASSOCIATION OF TEXAS. 1904.

TRANSACTIONS OF THE NEW HAMPSHIRE MEDICAL SOCIETY. 1904.

TRANSACTIONS OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION. 1903-1904.

POLITICS IN NEW ZEALAND. By Frank Parsons and C. F. Taylor. Published by C. F. Taylor. Philadelphia. 1904.

Book Notices.

Under the Charge of

RAY CONNOR.

INTERNATIONAL CLINICS. Edited by A. O. J. Kelly, A. M., M. D. Volume IV. Fourteenth Series. 1905. 314 pages. 79 illustrations. Cloth, \$2.00. J. B. Lippincott Co. Philadelphia, New York, London. 1905.

The present volume is a fitting completion of the fourteenth series. The various teachings of Continental, English and American writers can be found in its pages. The section on Treatment is nearly monopolized by the French authors. Hayem contributes a good article on the Excessive Use of Drugs in the Treatment of Chronic Diseases, with Reference to Medicinal Intoxication. Myron Metzenbaum considers Radium: Its Value in the Treatment of Lupus, Rodent Ulcer and Epithelioma.

In the section on medicine Chronic Polycythemia with Enlarged Spleen (Vaquez's Disease), Probably a Disease of the Bone-Marrow is the first article. Weber and Watson report a fatal case of this rare affection and go into the question of its etiology. Other excellent articles are to be found in this section by S. Solis Cohen, Duckworth and Senator.

Orthopedic work receives especial prominence in the surgical portion of the volume. Bradford contributes an excellent and profusely illustrated article on Lateral Curvature of the Spine. Chronic Arthritis and Tuberculous Spondylitis are considered by different authors and other excellent articles are to be found under Gynecology, Neurology and Pathology.

The volume as a whole seems quite up to the standard of this well known and popular publications.

EYE, EAR, NOSE, AND THROAT NURSING. By A. Edward Davis, A. M., M. D., and Beaman Douglass, M. D. With 32 illustrations. Pages XVI-318. Size, $5\frac{1}{2} \times 7\frac{7}{8}$ inches. Extra Cloth. Price, \$1.25 net. F. A. Davis Company, Philadelphia. 1905.

This attractive little book takes up many things of prime importance not only to the nurse but also to the doctor who must often instruct parents or friends as to how to do the simplest details of the necessary treatment. A brief description of the anatomy of the special senses precedes the treatment of the various forms of disease. The cleansing of the various structures is gone into in detail and much valuable and practical information given not only serviceable for nurses but also for those who are not thoroughly familiar with handling this class of cases.

The arrangement of the book is good and the style clear and concise. The illustrations are mostly from photographs and are excellent. The mechanical features of the book are quite satisfactory and it should find a useful and extended field.

A COMPEND OF THE DISEASES OF THE EYE AND REFRACTION, including Treatment and Surgery. By Geo. M. Gould, A. M., M. D. Third edition. Revised and Corrected. 296 pages. 109 illustrations. Cloth, \$1.00 net. P. Blakiston's Son & Co., Philadelphia. 1904.

As might be expected from its authors, this number of Blakiston's Quiz-Compendis is especially full on the side of refraction which with the examination of the eye takes up nearly one-half of the work. The consideration of the diseases of the eye is very good however and a great deal of useful knowledge has been condensed into convenient form. In the brief list of local ocular therapeutics, one misses such well known and useful drugs as argyrol and dionin which might well have been substituted for others had space demanded.

The illustrations are numerous and as a rule useful although the representation of the normal fundus and the other colored drawings leave much to be desired. A glossary and index complete the book.

A PRACTICAL TREATISE ON NERVOUS EXHAUSTION (Neurasthenia), Its Symptoms, Nature, Sequences, Treatment. By George M. Beard, A. M., M. D. Edited with notes and additions. By A. D. Rockwell, A. M., M. D. Fifth edition, Enlarged. Price \$2.00. E. B. Treat & Company, New York City. 1905.

The fifth edition of Beard & Rockwell's work on Nervous Exhaustion is quite similar to their fourth edition. Chapter six has been rewritten and chapter seven added. The last chapter is given up to the "neuron theory" in its relation to the treatment of neurasthenia. As has been said "even if the neuron theory is not susceptible of proof, it is at least a good working hypothesis." The chapter on Hygiene of Nervous Exhaustion is excellent and is well worth the attention of the physician who is so constantly meeting cases of this sort. This book has found practical favor with the medical man in the past as is shown by the number of editions it has passed through. No doubt it will meet the approval of a large part of the profession in the future.

Progress of Medical Science.

MEDICINE.

Under the Charge of

HARRISON D. JENKS.

Insects and Transmission of Disease.—The following diseases are wholly or partially transmitted by insects: a. Malaria—the plasmodium malaria requires two hosts for its full development. One must be the mosquito. b. Yellow Fever—the mosquito genus, *stegomyia*, seems necessary as a preliminary host for the germ. c. Elephantiasis—the *filaria sanguinis hominis* is probably always transmitted through the mosquito. d. Trypanosomiasis, due to the animal parasite *trypanosoma* found in the blood of the affected animals producing different diseases in different animals is transmitted by insects. The disease most known about is the sleeping fever affecting the colored population of Africa carried by the Tsetse Fly. f. Relapsing Fever. This seems to be transmitted by the bed bug. g. Texas Fever of cattle conveyed by the tick *Boophilus bovis*. h. Typhoid Fever. A certain proportion of cases of typhoid is due to the spread by flies. The typhoid bacillus has been isolated from the fly. It has been proved that the germ can remain active in the fly for at least twenty-three days. i. Tuberculosis—Flies here play a certain role, the exact value of which is not altogether known. j. Plague. This disease seems often to be transmitted by fleas, either those that infest the human being or the rat flea. This flea leaves the animal as soon as it gets cold. k. Cholera partially at least by flies. l. Yaws. While the cause of the disease is unknown, there seems some connection between the "yaws flies" and the disease. m. Leprosy. It is likely that it is conveyed by flies and mosquitoes. n. Anthrax seems to be carried frequently from animal to animal by flies and occasionally so from animal to man. o. Worms. The swallowing of insects has caused tapeworm infection for part of the life of some varieties is spent in the bodies of fleas and dog lice. p. Impetigo Contagiosa. There is evidence that this may be conveyed through the medium of lice. Experimentally this has been done in fifty per cent. of the children exposed. q. Purulent conjunctivitis such as the Egyptian Ophthalmia and Florida Sore Eyes are probably transmitted by flies. r. Ordinary Infection—Fly bites have produced erysipelas, meningitis, and septicæmia. Probably other diseases can so be produced.

Of the mosquitoes concerned in conveying disease none are the common variety. Of the flies the common house fly is the one that causes the trouble. As such a fly is a rapid mover it is not at all impossible that some of the so-called sporadic forms of disease are results of fly infection.—(HENRY ALBERT, *New York Medical Journal*, Feb. 4, 1905.)

Abuse of Water Drinking in Disease.—The abuse of water drinking is not an American vice but is universal. It is most done at the various mineral springs where the principle seems to be to drink as much as possible no matter what the disease. The normal quantity of water for the healthy adult exclusive of the water in the food is from one and a half to two litres a day. Of this two-thirds appears in the urine, and one-third is retained in the body. Only a small amount, about ten per cent. of the water is absorbed from the stomach, the remainder passed into the intestines. It should be remembered that all water taken into the system must be excreted by the heart's force and so causes an additional drain on it if weak.

Water drinking has the following effects on the body: It acts on the metabolism, the temperature, the circulation especially the heart, the glandular secretions, and peristalsis. The most important effects are on the metabolism and circulation. The increased drinking of water does not increase the breaking up of albumins. It does cause a temporary increased excretion of urea but this stops if continued for a few days. But this seems to increase all the metabolism to some extent.

Hot water in small quantities raises pulse rate and lowers blood pressure; cold water lowers pulse rate and raises blood pressure. Lukewarm water lowers blood pressure. Water at ordinary temperature has no effect. These effects cease in twenty minutes and are due to influence on the vasomotor centers. Diuresis depends not upon the water in the body but upon the blood pressure in the kidneys. The relation of water drinking at meals to obesity resolves itself into the fact that with more water used more food can be taken and relished.

Water drinking is most abused in nephritis. It has been found that instead of increasing the quantity taken it should be restricted to 500 to 700cc; especially is this necessary in the late stages of the interstitial form.

In heart disease the abuse of fluids is not quite so apparent, but just as bad. The dry diet is often of the greatest value in cardiac disease. The chronic hyperæmia of the kidney, the existence of dropsy, hydræmic plethora and anæmia in chronic cardiac trouble is enough to warn against too much liquid diet. In chronic gastric and intestinal troubles too much water is used; following the ideas of Salisbury and Banting such patients are known to secrete but little urine. In chronic troubles if much water is to be used the patient should be put to bed and so the circulation as little as possible will feel the strain.—(MANGES, *N. Y. Medical Journal*, Jan. 21, 1905.)

SURGERY.

Under the Charge of

MAX BALLIN.

Blindness After Injection of Paraffin Into a Saddle Nose.—Mintz, of Moscow, injected 5 grs. of Paraffin (melting-point of 43c.) under the skin of a saddle-nose in order to improve this deformity. The same patient had been injected once before without any bad results. Three minutes after the injection, sharp pains were felt in the left eye, a little later the left eye became totally blind. Ophthalmoscopy did not show any embolism of the central artery of the retina, but showed overfilled veins. Twenty-four hours after the injection, exophthalmus, chemosis and cloudiness of the cornea were noted on the left eye. The skin around the injection on the nose, became necrotic. Exophthalmus and chemosis disappeared slowly, but the optic nerve became atrophic. In this case there was thrombosis of the external nasal veins, these veins extending into the inferior ophthalmic and finally into the central vein of the retina.

As this is the third case on record of blindness after paraffin injection, Mintz, who was very careful in his technique, begs us not to consider paraffin injection a trivial operation.—(*Zentralblatt fuer Chirurgie*, 1905, No. 2.)

Hepatic Abscess.—Hepatic abscess is a pathologic condition that has been recognized for many centuries.

It is widespread in its occurrence.

The so-called "tropic liver abscess" occurs most frequently in the hot countries

Hepatic abscess is at times the result of trauma. Usually, however, it is the result of invasion of the hepatic tissue by various forms of parasitic protozoa and pyogenic organisms.

That form commonly known as "amebic abscess of the liver," is in reality not an abscess, but rather a necrosis and liquefaction of hepatic tissue. When pus is encountered, it is the result of contamination by pyogenic organisms.—(NORVELLE WALLACE SHARPE, *American Medicine*, Vol. IX, No. 4.)

Stones in Both Kidneys.—Treplin reports five cases of sudden anuria, caused by obstruction of both ureters, by stones.

1. In sudden anuria of this kind, operation is imperative. Cases in which large stones in both kidneys interfere with sufficient function of the organs, should also be operated upon.

2. In case of sudden anuria by obstruction of both ureters, operation on one kidney is sufficient, for the time. In case of large stones in both kidneys, both kidneys should be operated upon.

3. In case of sudden anuria, the presumably better kidney should be first freed from stone. In cases of the second kind—large stones in both kidneys—the more diseased kidney should be operated upon first.

4. Catheterization of both ureters and determination of cryoscopic values—(freezing point of urine)—of the urines segregated from both kidneys are the only exact methods to decide which one of the kidneys is the better one.

5. Cases of this kind are considered cured if there is no more lowering of the freezing point of the urine.—(*Archiv. fuer Klinische Chirurgie*, Vol. 74, Part 4.

Prostatectomy.—In the weakest and most run-down cases M. B. Tinker has employed permanent suprapubic drainage. This is rapidly performed under eucaïn, and he thinks it is the safest of all procedures. Except in absolutely desperate cases, he believes prostatectomy under local anesthesia is safe as compared with the operation under general anesthesia. The use of adrenalin with the ordinary local anesthesia greatly prolongs and adds to its efficiency, prevents the pain and congestion following, and renders the operation almost bloodless. The knowledge of the nervous anatomy of the parts is, of course, absolutely essential, and the course of the pudic nerve and the long pudendal nerve close to the base of the tuberosity of the ischium are important. He favors the use of Young's tractor, and recommends allowing sufficient time for the anesthetic to act before making the incision. With sensitive or nervous patients he finds it often better to use a little nitrous oxid gas or primary ether anesthesia, as the infiltrating solution can not reach the parts involved in the deeper enucleation. These parts, however, are supplied by the hypogastric plexus of the sympathetic and the discomfort is not necessarily great. He reports a case in which he thinks this method of operation was directly life saving.—(*The Journal of the American Medical Association*, February 11, 1905.)

GYNECOLOGY AND OBSTETRICS.

Under the Charge of

B. R. SCHENCK.

Syphilis Acquired by Physicians.—Blaschko has observed 12 cases of syphilis among physicians, during the past ten years, all acquired in professional work.

The initial lesion, under such circumstances, generally occurs on the fingers and is frequently overlooked or misinterpreted. It is only from its chronicity and bluish infiltration that its true nature is suspected. In two of the cases there was a mixed streptococcic infection.

In considering the differential diagnosis of chancre of the finger, one must bear in mind that herpes is preceded by nerve pains and is at an end in about ten days. Chancroid readily clears up under carbolic acid or iodoform.

In most of the cases, the appearance of the general symptoms or the development of a bubo was the first sign which attracted attention. In one case, the primary sore was on the face; in another the point of entry of the virus was never determined.

The infection is generally acquired through erosions at the base of the nails, produced by the scrubbing brush and is usually received at operations on bubos, etc., or during confinements. The danger in the latter cases is particularly great in instances of abortion or premature birth, for these so often occur in syphilitic women. One case of the author's was acquired at a post-mortem examination on a syphilitic, performed 24 hours after death.

The writer emphasizes the necessity of every physician keeping in mind the possibility of acquiring syphilis in every case upon which he operates or which he examines bimanually. General practitioners often disregard this important possibility. Too little importance is laid on the scrubbing of the hands *after* operation. The author's method is to touch every little fissure with a 2 or 3 per cent. solution of silver nitrate and he advises rubber gloves to be worn for all gynecologic examinations, in the interest of both the patient and the physician.

Silver nitrate and bichloride of mercury will abort infection after it has taken place.

On one occasion, Blaschko scratched his finger while operating on a bubo. He immediately applied the electric needle and the next day touched the spot with the actual cautery. No symptoms resulted.

He knows of no instance where the disease was transmitted by the physician, whose family life suffers more than does his professional.—(*Berliner klin. Woch.*, Dec. 26, 1904.)

The Treatment of Haemorrhoids.—After giving a simple and satisfactory classification of hæmorrhoids, Gant says that the treatment, when intelligently carried out, is universally successful. The operative treatment is by far the most satisfactory.

The non-operative treatment is simple and consists in requiring the patient to remain in the recumbent position, restricting the diet to liquids and semisolids, giving laxatives, applying the ice bag and exhibiting astringent remedies to diminish the inflammation and swelling. If there be strangulation, pain and spasm of the sphincter, use hot water compresses and insert suppositories containing a quarter of a grain of morphine, eucaine or cocaine. If there be depleting hæmorrhage, insert a small plug of gauze, about the size of the little finger and three inches long, moistened by a 2 per cent. silver nitrate solution, 10 per cent. ichthyol or 50 per cent. balsam of Peru. In most cases the non-operative treatment is palliative and must sooner or later be followed by operation.

The operations most frequently practiced are (1) clamp and cautery, (2) ligature, (3) excision and (4) injection. All others are either obsolete or have met with slight favor.

Gant is partial to the clamp and cautery operation, especially when general anesthesia is employed. Either this or ligature, when properly performed, is invariably followed by satisfactory results. The Whitehead operation (excision) is severely condemned. Experience has convinced the author that, although cures are occasionally obtained by the injection method, it is in most cases unsatisfactory, because not permanent. Furthermore, it is dangerous.

Gant makes a strong plea for the office treatment of all uncomplicated cases. He has now discarded cocaine and eucaine and operates under local anesthesia, induced by distending the tissue with sterile water. There is thus no danger of poisoning, no bleeding at the operation and but little pain following.

In the thrombotic variety, the clot is turned out and the cavity packed; in the cutaneous, the pile is excised and the wound sutured or left to heal by granulation; in the internal, the clamp and cautery, ligation or linear incision methods are employed.

Gant has operated on more than 250 cases under sterile water anesthesia with the most gratifying results. These cases embraced every variety of pile tumor and effective radical treatment was rendered by this method so simple and easy that the author thinks that it should be relegated to oblivion the much vaunted but uncertain and dangerous injection treatment.—(*New York Med. Jour.*, Jan. 7, 1905.)

THERAPEUTICS AND PHARMACOLOGY.

Under the Charge of

W. F. WILSON, JR.

The Administration of Anti-streptococcic Serum. (CONCLUSIONS.)

1. That injection of anti-streptococcic serum in cases of pure streptococcal infection has been followed by strikingly beneficial results.

2. That variability in the results of the serum in proved streptococcal infection has been due to the selective activity displayed by the antitoxin of each variety of streptococcus or to the serum being used too late in the case or having lost its activity from staleness.

3. That more uniform results are likely to be obtained from the present "compound" anti-streptococcic serum than from the earlier forms, from the prompt injection of serum at the commencement instead of near the close of a severe infection, and from the use only of serum which has been recently prepared.

4. That the initial dose may with benefit be increased and that a large quantity spread over several days causes no ill effect.

5. That the administration of the serum should be continued for some days after the general symptoms have disappeared and a recrudescence thus avoided.—(WALKER, *The Lancet*, December 31, 1904.)

The Administration of Anti-streptococcic Serum.—The dose advised by Foulerton, at the commencement is at least 20 cubic centimeters, and one must be prepared to repeat this dose if necessary at least every 24 hours. He also says that if the serum is going to do any good at all the effects will be apparent at once, as the serum is antitoxic and not bactericidal, so that if in a case of streptococcic puerperal infection no improvement follows, two doses of 20 cubic centimeters administered within twelve hours, it is useless to persist in administering it, another brand of serum should at once be tried.—(*The Lancet*, December 31, 1904.)

Suprarenal Extract.—Meltzer and Auer give as the result of their experiments as a brief résumé the following:

1. Intravenous injections of suprarenal extract retard invariably the processes of absorption and transudation.

2. Subcutaneous injections also often show a retardation of these processes; the effect, however, is neither strong nor constant.

3. In the frog, the retardation of absorption of some substances was recognizable only when

suprarenal extract was previously mixed with that substance, or when both substances were injected into one and the same lymph sac.

4. It is assumed that the suprarenal extract increases the tonicity of the protoplasm surrounding the pores of the endothelia of the capillaries, thereby reducing the facility for the interchange between the blood and the tissue fluid.—(*The American Journal of the Medical Sciences*, January, 1905.)

Local Analgesia.—Barker reports 91 operations from abdominal sections in which the only anaesthetic employed was local. He says we must remember in using this method that cocaine applied to the trunk of a sensory or mixed nerve abolishes sensation throughout the whole distribution of the nerve and that if the circulation of a part was retarded by a ligature or the application of cold, the action of the analgesic compound injected into it was maintained and even intensified so long as the circulation was controlled or retarded. For the first point—knowledge of the distribution of the nervous supply of a part is essential, the second point is accomplished by the use of adrenalin. From fear of the toxic effects of cocaine, he uses B-eucaine, of which he has used as much as 6 grains at one time. The usual formula, however, is:

Distilled water	100. or 3½ oz.
B-eucaine2 or 3 grs.
Sodium chloride8 or 12 grs.
1 pro. mille adrenalin chloride solution	Mx.

All this quantity of fluid can be used in ordinary cases if necessary, and it is quite sufficient for most. But he has often used twice as much over large areas, and has seen no ill results from the six grains of eucaine or mxx of adrenalin.—(*The British Medical Journal*, December 24, 1904)

Tubercular Adenitis Treated by the X-ray.**CONCLUSIONS:**

1. X-ray treatment offers the best cosmetic results.

2. The danger of secondary involvement or dissemination is lessened.

3. Suppurating glands should be incised and drained, and then subjected at once to X-ray treatment.

4. Cases should be treated as early as possible.—(PFAHLER, *Therapeutic Gazette*, January 15, 1905.)

DERMATOLOGY, SYPHILIS AND CUTANEOUS RADIOTHERAPY.

Under the Charge of

A. P. BIDDLE.

The Melanoma Question.—Unna's theory of the origin of the soft naevus (mother mole) from surface epithelium by a metaplastic change in the rete cells and their gradual descent into the cutis in intrauterine or early life has been gradually gaining supporters since its first promulgation in 1893. These adherents to his views hail from many lands, and are both general histopathologists, and those whose special work lies in the skin. The older view, of a genesis from lymphatic endothelium, is maintained with some heat chiefly by German general pathologists. In the monograph, the first installment of which appears in this issue of the *Journal of Cutaneous Diseases*, the author, James C. Johnston, instructor in pathology and chief of clinic, department of dermatology, Cornell University Medical School, joins forces with the latter school and offers some data illustrated as to crucial points by photographs, tending to show that naevus cells are endothelial, and that the malignant growth called by Unna "melanocarcinoma," being a derivative of the soft mole, is also of endothelial origin. The main point in his argument, following Hanseemann, is a demonstration of a continuity of structure between groups of naevus cells and the superficial plexus of lymphatic vessels in the skin. He maintains that this demonstration should be convincing when it can be made, but adds some corroborative testimony from the histology of the mole.

Passing from the question of histogenesis of moles, the history and histology of nine cases of malignant melanotic tumor are given, which are classed under one head, Melanoendothelioma, and further subdivided into Naevomelanoma, Melanotic Whitlow, of Hutchinson, and Malignant Lentigo of the French. Although the tissue origin is the same for them all, from lymphatic endothelium, the latter two, which are often neglected in literature, begin like choroid melanoma without the interposition of any naevoid structure. They have one clinical feature in common which does not occur in naevomelanoma, pigmented lines running irregularly from the original neoplasm and called "nitrate of silver streaks." All three are equally malignant. Melanotic onychia begins always in one nail fold; malignant lentigo on the extremities, generally in old men.

Differing radically from the Unna school in his interpretation of naevus structure, Johnston calls attention to certain cutaneous melanotic tumors which are known to possess only local malignancy like rodent ulcer, and describes three cases which are epitheliomata of well recognized varieties with an added pigmentation varying

greatly in amount. Similar cases have been reported in support of Unna's contention in regard to naevus, but in reality they have no bearing on the controversy since no trace of mole tumor can be found in them, and Unna himself denies their existence. Owing to the melanosis, diagnosis of melanoepithelioma is possible only by the microscope.

Lastly, several cases are offered in proof of the statement that early and radical excision offers some hope of cure even in the most malignant of melanoendotheliomata.—(*Journal of Cutaneous Diseases*, January, 1905.)

The Sack Treatment of Syphilis.—Major Pollock, R. A. M. C., describing the methods of treatment of syphilis as recently observed in some of the leading Dermatological Cliniques on the continent of Europe, writes of the plan in vogue in Stockholm as follows:

The most interesting feature here was Welanders's "sack" treatment. As soon as he had diagnosed syphilis, he gave three or four injections of his "mercurial oil" in order to get the patient rapidly under the influence of mercury; the remainder of the course was then carried out by means of his sack treatment. In the case of an adult this was applied as follows: A cotton bag was made sufficiently large to cover the whole front of the chest, the upper end being left open. Each morning this bag was turned inside out and ten grammes of the unguentum cinereum (containing about fifty-three grains of metallic mercury) was rubbed into the side of the bag which was to be worn next to the skin; the bag was then turned back again and the patient wore it for the following twenty-four hours. This treatment was carried out for forty to sixty days, and was repeated at subsequent intervals just as in the case of courses by inunction or injection. For infants suffering from congenital syphilis one gramme was rubbed in daily. For pregnant women and infants suffering from syphilis, and for whom a course of mercury is essential, the method seemed especially suitable.

Taking a general view of syphilis and its treatment in all places which he visited on the continent, the one great feature which made the most impression on him was that syphilis, and, in fact, all venereal diseases, were regarded as diseases worthy of serious consideration and entitled to proper treatment, and not as evidences of crime or vice. Everywhere ample provision was made for treating cases in an infective state *in hospital*. The wisdom of this from the point of view of the general health of the community cannot be denied.—(*The British Journal of Dermatology*, January, 1905.)

DISEASES OF THE NERVOUS SYSTEM.

Under the Charge of

GUY L. CONNOR.

A New Reflex; Gordon's Paradoxical Flexor Reflex.—This reflex is elicited in the following manner. The patient is seated with his feet on a stool. The examiner, who is always on the outer side of the tibia, places his thenar and hypothenar on the inner side of the tibia, and exercises deep pressure with the fingers on the calf muscles (the pressure must be deep in order to be transmitted to the flexor muscles). The great toe or all the toes then extend.

The paradoxical flexor reflex is a sign pointing to an involvement of the motor tract. It is not found in patients suffering from organic diseases of the other portions of the cerebro-spinal system, paralysis agitans, hysteria or in normal persons.

The value of this new reflex is particularly appreciated in those obscure cases in which Babinski's sign (which gives extension of the toes by irritating the skin of the soles of the foot) is either absent or very slightly marked and a diagnosis of organic disease is in doubt.

McCarthy believes that Gordon's reflex is a new method of bringing out Oppenheim's reflex (stroking firmly along the inner border of the tibia). Others, Mills and Dercum, claim it is a new reflex and does not resemble at all Oppenheim's reflex. Spiller suggests that it would be well to determine in what proportion of cases the extension of the toes as obtained by Oppenheim's method is associated with extension of the toes as obtained by Gordon's method.—(*The Journal of Nervous and Mental Disease*, February, 1905).

Paralysis of the Abdominal Muscles in Acute Anterior Poliomyelitis of Infants.—In looking over the literature on the subject, so few cases have been found that we are justified in concluding that residual paralysis of the abdominal muscles in acute anterior poliomyelitis of infants is rare. Initial paralysis of these muscles in poliomyelitis may not be as rare an occurrence as statistics would show. It is possible that many cases showing involvement of the abdominal muscles are overlooked, first because it is a matter of common record that paralysis at the onset is more widespread than at any subsequent time, and second because of deficient observation, due partly to the carelessness of the

physician, but more especially to the fact that these cases of poliomyelitis are not seen by the doctor for some days or even weeks after the onset of the trouble.

In the large number of cases of acute anterior poliomyelitis seen at Johns Hopkins Hospital dispensary, the following is the only one showing a residual paralysis of the abdominal muscles. Isaac H., Russian Jew, age 21 months. Family history is negative. Child was said to be healthy until present attack. Two weeks previous, child had an attack of fever lasting three days. During this time the child slept almost continually. Afterwards it was noticed that the infant could not sit or stand and that the right leg and left arm were paralyzed. Within three weeks the movements had returned to both affected members, the hand to less degree. Within five weeks from onset of the attack the child could walk, using both arm and leg fairly well. No note was made on the condition of the abdomen prior to nine weeks after the onset of the fever. There must have been asymmetry from the first which became more apparent as the muscles grew more flaccid and atrophic.

Abdominal examination showed the following: Relative hepatic dullness begins 3 cm above the costal margin and extends 8 cm downward in the nipple line. Spleen is palpable. Palpation and percussion are otherwise negative. In dorsal decubitus the abdomen is full, but is more prominent on the right. Abdominal skin reflex is present on the left, absent on the right. Umbilicus is in mid-line. As child cries and raises the intra-abdominal pressure, the right side balloons out very markedly. On palpation the muscles may be felt to contract under the hand on the left but not on the right. In the erect position the asymmetry is much more evident and as the child cries, the right side balloons out to the full limit of the flaccid and paralyzed wall. There is no lordosis, but there is a slight scoliosis in lumbar region with convexity to right.

The paralyzed muscles are the obliqui, transversalis and half of the rectus on the right.—WM. B. CORNELL, *Johns Hopkins Hospital Bulletin*, January, 1905).